

March 22, 2000

CERTIFIED MAIL (Z 533 684 328)

Mr. Benjamin L. Williams
Pennsylvania Department of Environmental Protection
Southeast Regional Office
Waste Management Program
Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428-2233

Re: Multiple EPA Identification Numbers at Atlantic Richfield Company Site 3801 West Chester Pike, Newtown Square, PA 19073
Lyondell Chemical Company (EPA ID No. PAD046538211)

Dear Mr. Williams:

We are notifying you that Lyondell Chemical Company ("Lyondell") is selling its Polyols Business, pending final approvals, to Bayer Corporation ("Bayer") effective approximately April 1, 2000. As a result of this sale, Bayer will own Lyondell's polyol technology operations at the Research and Development (R&D) Facility located in Newtown Square, PA. Although the site is currently owned by Atlantic Richfield Company, it will be leased by both Lyondell and Bayer, and each company individually will be a large quantity generator of hazardous waste. Please note that, with regard to Lyondell, this notification is for informational purposes only, and does not require accompanying submittal of a revised EPA Form 8700-12. However, as Bayer is a distinct entity (or "person" per the definition of generator at 40 CFR 260.10 and incorporated by reference in 25 Pa. Code 260a.10), we understand that Bayer will require its own EPA Identification Number (EPA ID#). We understand this to be the case notwithstanding the fact that two EPA ID#s will subsequently be assigned to the single subject site. Bayer is in the process of obtaining its own EPA ID# from EPA Region III and plans to have it in place on the effective date of the sale. As a result, as of April 1, 2000 two EPA ID#s will be in place for the subject site.

We are also notifying you that, as part of the expected lease arrangements and general services agreement between Lyondell and Bayer, there will be portions of the site shared by both companies and services potentially provided by Lyondell for Bayer. With regard to hazardous waste, Lyondell and Bayer will share the on-site less than ninety day accumulation area with each company's waste being clearly identified. Lyondell, as host, will provide shared services to Bayer which are expected to include collection of Bayer generated waste, movement of Bayer generated



Mr. Benjamin L. Williams PAD046538211 March 22, 2000 Page 2

hazardous waste to the less than ninety day accumulation area, and arrangement of off-site treatment, storage and disposal of Bayer generated waste. We understand that this arrangement, which is strictly for efficiency purposes, will not elevate either Lyondell or Bayer from generators to owners or operators of hazardous waste treatment, storage and disposal facilities. Accordingly, Lyondell and Bayer will conduct their hazardous waste operations in accordance with 40 CFR 262 and 25 Pa. Code 262a without the need for any hazardous waste permit.

Finally, each company will be responsible for complying with Federal and Pennsylvania hazardous waste regulations (in addition to all other regulations) applicable to their individual operations. As the operations transition, and where appropriate when the transition is complete, Lyondell and Bayer will jointly operate under existing preparedness, prevention and contingency plans, source reduction strategies, etc. that are presently in place for the site.

If you have any questions, please call me at (610) 359-4849.

Sincerely,

Thomas P. Baker

Environmental Superintendent Lyondell Chemical Company Endorsed By:

James J. Sheridan

Environmental Specialist

Bayer Corporation

cc:

Mr. Grant Dufficy

U.S. Environmental Protection Agency, Region III

RCRA Programs Branch (3WC31)

1650 Arch St.

Philadelphia, PA 19103-2029

Ms. Jennifer Collins

U.S. Environmental Protection Agency, Region III

RCRA Programs Branch

Pennsylvania Section (3WC11)

1650 Arch St.

Philadelphia, PA 19103-2029

HS&E Central File

ARCO Chemical Company

3801 West Chester Pike Newtown Square, Pennsylvania 19073-2387 Telephone 610 359 2000





EPA (Comment III

July 24, 1997

U.S. EPA Region III RCRA Programs Branch Pennsylvania Section (3HW51) 841 Chestnut Building Philadelphia, PA 19107

Re: Modification of Notification of Regulated Waste Activity

ARCO Chemical Company 3801 West Chester Pike Newtown Square, PA 19073 EPA ID No. PAD046538211

To whom it may concern:

Attached is an updated Notification of Regulated Waste Activity (EPA 8700-12) for the hazardous waste activities at the Newtown Square facility of ARCO Chemical Company (ACC). The waste codes typically generated by the facility are listed.

ACC is a Research & Development facility and no commercial manufacturing operations are located at this site. Pilot plants and research laboratory operations are the source of the chemical wastes.

Should you have any questions about the information submitted in this report, please contact me at (610) 359-4604.

Sincerely,

Rita M. Sammons

Environmental Superintendent

Enclosure

CC:

Pennsylvania Department of Environmental Protection Bureau of Land Recycling and Waste Management Waste Management Program 16th Floor, Rachel Carson State Office Building PO Box 2063 Harrisburg, PA 17105-2063

Form Approved MIE No. 2060-0028 Explose 9-30-96
// GSA No. 0246 EPA-DT

Please refer to the Instructions for Filling Notification before completing this form. The Information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

SEPA

Notification of Regulated Waste Activity

Date Received (For Official Use Only)

and Recovery Act). United States Environmental Protection Agency t. Installation's EPA ID Number (Mark 'X' in the appropriate box) C. Installation's EPA ID Number B. Subsequent Notification A. First Notification DA 2 1 5 3 (Complete item C) II. Name of installation (Include company and specific site name) P N C E MI C Α R Ή III. Location of Installation (Physical address not P.O. Box or Route Number) Street 8 0 1 \mathbf{E} R Ι K \mathbf{E} S Ε S Η Street (Continued) Zip Code State City or Town 8 R E **County Code County Name** IV. Installation Mailing Address (See Instructions) Street or P.O. Box Α Μ Ε Zip Code City or Town State V. Installation Contact (Person to be contacted regarding waste activities at site) Name (Last) (First) \mathbf{T} R А M Τ Job Title Phone Number (Area Code and Number) 4 6 VI. Installation Contact Address (See Instructions) A. Contract Address B. Street or P.O. Box Location Mailing Other XX City or Town State Zip Code VII. Ownership (See Instructions) A. Name of installation's Legal Owner C R Street, P.O. Box, of Route Number Т Ε E \mathbf{T} lR 0 City or Town State Zip Code 0 D. Change of Owner Indicator C. Owner Type (Date Changed) **B. Land Type** Phone Number *(Area Code and Number*) Month Х Р Р

•		ID - For Official Use Only
VIII. Type of Regulated Waste Activity (Mar		ructions)
A. Hazardous Wa	aste Activity	B. Used Oil Recycling Activities
1. Generator (See Instructions) a. Greater than 1000kg/mo (2,200 lbs.) b. 100 to 1000 kg/mo (200-2,200 lbs.) c. Less than 100 kg/mo (220 lbs) 2. Transporter (Indicate Mode in boxes 1-5 below) a. For own waste only b. For commercial purposes Mode of Transportation 1. Air 2. Rail 3. Highway 4. Water 5. Other - specify	3. Treater, Storer, Disposer (at Installation) Note: A permit is required for this activity; see instructions. 4. Hazardous Waste Fuel a. Generator Marketing to Burner b. Other Marketers c. Boller and/or industrial Furnace 1. Smelter Deferral 2. Smell Quantity Exemption indicate Type of Combustion Device(s) 1. Utility Boller 2. Industrial Boller 3. Industrial Furnace Underground injection Control	1. Used Oil Fuel Marketer a. Marketer Directs Shipment of Used Oil to Off-Specification Burner b. Marketer Who First Claims the Used Oil Meets the Specifications 2. Used Oil Burner - Indicate Type(s) of Combustion Device(s) a. Utility Boiler b. Industrial Boiler c. Industrial Furnace 3. Used Oil Transporter - Indicate Type(s) of Activity(les) a. Transporter b. Transfer Facility 4. Used Oil Processor/Re-refiner - Indicate Typs(s) of Activity(les) a. Process b. Re-refine
IX. Description of Hazardous Wastes (Use	**	
A. Characteristics of Nonlisted Hazardous nonlisted hazardous wastes your installation		
1. Ignitable 2. Corrosive 1. Fleactive 4. To (D001) (D002) (D003) C1	serectoristic (List specific EPA hazardous waste nu	mber(s) for the Toxicity characteristic contaminant(s)) 0 5 D 0 D 6 D 0 D 7
B. Listed Hazardous Wastes. (See 40 CFR 2	61.31 - 33; See instructions if you need to lis	t more than 12 waste codes.)
1	3	5 F 0 0 5 11 D 0 2 2 D 0 2 9
1 2 X 8 5 0 X 9 0 0	X 9 1 b X 9 4 0	5
i certify under penalty of law that this document a system designed to assure that qualified personne or persons who manage the system, or those persons best of my knowledge and bellef, true, accurate, a including the possibility of fine and imprisonme	el properly gather and evaluate the information sons directly responsible for gathering the inf nd complete. I am aware that there are signific	submitted. Based on my inquiry of the person or submitted is, to the
Signature Charles W. Rowff	Name and Official Title (Type or prin Charles W. Ruoff Facility Manager	7/24/97
XI. Comments		
		DAG 1: 36 1
	- Just	BAH/12 /31/92
Note: Mail completed form to the appropriate EP	A Regional or State Office. (See Section III o	f the booklet for addresses.)

111

ID - For Official Use Only

B. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33; Use this page only if you need to list more than 12 waste codes.) 13 14 15 16 17 18)]	aye (<i>u 116</i> 6	1	nat i			1 14 5	1				
	13				Т	T	I				Γ	15	Τ.		_		T	T		_	.	T	Τ_			T .	18	T.
)	0 <u> </u> 19	30000	9	I		D 20	7	2	•	N	8	9 21	9	1	P	0	<u>]0</u> 22	3		Р	C) <u> 0</u> 23	5		P	<u> 10</u>	<u> </u>	[]
		-			T	T	1	1		P	Γ	2				0	2	8			0	3	To		Р	0	4	7
>	0	1	2	P		0 <u> </u>	⊥ }	4		Р	0	1 <u>2</u> 27	4		P		<u> ∠</u> 28	<u> 8</u>		2		ည 29	10		1	1-	30	Ľ
,		4	8	P	, T	- T	6	8		P	0	T	9	4	P	0	7	5		P	0	7	7		Р	0	8	7
	31					32						33	1				34					35					36	
,	0	9	8	Р		1	0	4		Р	1	0	5		P	1	0	6		Р	1	0	8		Р	1	1	3
	37					38	3					39					40	ges*	İ			41	т			т	42	_
Р		1	9	P	·]	1	2	0	#	P	2	0	5	,	U	0	Ю	1		U	0	þ	<u> </u> 6		Ū	0	0	7
	43			-	- -T	44	********	_	1		Γ	45	T			T	46 	Τ_			T	47 _	T_		_	T	48 _	Т
U		0	8	U			0	9		U	0	1 51	2		U	0	4 52	1		U	0	5 53	2		U	0	5 54	
	49			-	. T	50	6	9			T	Т	То	1	77	0	9	2		U	0	9	T ₆		U	1	T ₀	T
U	0 55	<u>6</u>	8	U		0 50	000 000 cc	9		U	0	8 57	Ţυ	$\prod_{i=1}^{n}$	ַ		5 8	14		LU		59	To			Τ Τ	60	
,	Т	 O	2	U		1	0	3		U	1	Το	5		U	1	О	6		U	1	О	7		U	1	0	Π
	61	<u> </u>			ı	62						63	1	1			54					65					66	
	1	1	2	U		1	1	3		U	1	1	7		U	1	2	1		U	1	2	2		U	1	2	
	67				— т	64					T	69	T	١,		;	70	т			T —	71	1			T	72 ×	Τ-
J		3	3	U		1	3	4		U	1	4	4	**	U	1	3	8		U	1	4	7		U	1	5	
	73			H		7					Γ.	75	T	-		1,	76	T,	1		.	77 	T	-	-	1	78	Т
J	1 7 9	5	2	Ŭ		1 <u> </u>	5	6		U	ΙΙ	6 81	0		U	ΙŢ	6 82	2		U	rit 1	6 83	5		U	ĬΤ	6 84	Ļ
J	1	******	8	- U	, T	· · · · · · · · · · · · · · · · · · ·		n	4	U	T		8		U	2	T	9		U		2 1	3		U	T	T	
	85		H	F		8	S		1 2	Ť	_	87	1.5	1			88	1-	1			89					90	1
J	2	1	6	U		2	1	7		U	2	2	1		U	2	2	2		U	2	2 2	3		U	2	2	
	91					9:					,	93	T -				94	Т.			<u> </u>	95	-T-			т	96	Τ-
J	2		8	U		2	4	6		U	<u> </u>	5	3		U	4		4		7	7		7		L			
	97				-т	91	8				T	99	Т			1	00	Т	-		1	01	T	-		1	02	Т
	10:	2	Щ	-		10	A	L			l	105	1			4	06					07]	08	L
													Τ					Π	1				Τ	1	H			T
	10)				11	0				L	111		1		1	12	1			1	13	1			1	14	
					T							T															T	Π
	11!	5				11	6					117				1	18	•			1	19	•			1	20	



March 2006

RCRAInfo CM&E EVALUATION - VIOLATION FORM

*EPA ID	Numb	er	PA	AD04653821	1		EIN				
Handler	Name		LY	ONDELL C	HEMICAL (COMPANY		<u></u>			
Street	380	1 WES	T CHE	STER PIKE							
City	NEV	NTOW	N SQU	ARE	State	PA	Zip Code	19073			
				d Status.	LQG □	sqg 🗆 c	ESQG □	Closed	Non-Handler		
				ed) YES	□ NO ⊠	If YES, complete the U	niverse Change S	ection (on rev	verse side of this form).		
RCRA N	on-Not	tifier?		YES N	10 X If YES	s, complete the Handler Se	ection (on reverse	side of this fo	m).		
Other Fa	cility I	nforma	tion Ch	anges? Y	ES NC	If YES, complete th					
Handler Name LYONDELL CHEMICAL COMPANY Street 3801 WEST CHESTER PIKE City NEWTOWN SQUARE State PA Zip Code 19073 Actual Generator Status Check only if different from Notified Status. LQG SQG CESQG Closed Non-Handler Universe Change Required? (Generator Status Change Required) YES NO SI YES, complete the Universe Change Section (on reverse side of this form).											
		*Тур	oe .			*Agency			Suborganization		
		CE		11/06	/2007	S	JMO		WM		
SNY, and CSE, FUI,	Pour Day Zero (mm/dd/yyyy): You need to specify Day Zero for all evaluation types except CDI, CSE, FUI, SNY, and SNN, otherwise it defaults to Evaluation Start Date. For CDI, CSE, FUI, and SNY evaluations, you must select a previous CEI Start Date Reclassified SV Date: Only applicable for SNY evaluation type as appropriate.										
	***	No	tes:		VIOLATI	ONS NOTED AND IMM	MEDIATELY CO	RRECTED			
	_ c	itizen C	omplain	t Mu	ltimedia Insp	pection	npling [title C		
				Focused Co	-	•	ation Type FCI)				
		_		_	_		_				
	TH		UIC	☐ UOI	_		eify):				
	CAR		CPC	□ DOS			RTI				
Does this	s Eval	uation	Add/Up	date/Delete	a Violation?	YES X NO C			ns Section(s) on page 2		
Does this	s Eval	uation	link to a	Commitme	nt?	YES NO D					
Does this	s Evalı	uation	link to a	3007 Requ	est?	YES NO	If Yes, pleas Information	e use the RC Requests an	CRAInfo 3007 nd Commitments Form.		
OUTSTA	NDING	VIOL	ATIONS	COVERED	BY ABOVE	EVALUATION? YES	□ No [X]	lf Yes, fill in	information below.		
*Seq. N	o.	*Viola	tion Typ	e *Agency	,	(Type + Citatio		*			

]						

^{*}Required Fields

RCRAInfo CM&E Evaluation-Violation Form, Page 2

EPA ID Num	ber				На	ndler Nar	ne						
PAD046583	211				LY	ONDELL	CHEMIC	CAL	COMPANY				
/A 1 1141	1 3 /2 - 1 - 42					SECTION		-		1 \	F\		
(Additional	violations	can be added	/updated	delete	a us	ing the RC	KAINTO	CIV	I&E Additiona	Violatio	ns Form)		
VIOLATION	⊠ Add	☐ Update	☐ Del	Link to Above Evaluation									
Seq. No	Violation Type	Agency		ined Da dd/yyyy		Retu		mplia alifie	ance (RTC) Actual RTC Date r (mm/dd/yyyy)				
	262 C	S	11/6/2007			O A RTC Qualifier in entering an Actua			r is required if				
Notes:						e	ntering an	ACIU	ai RTC Date.				
LINK CITATIO	ONS TO AR	OVE VIOLATI	ON?	VE	s 🗵	NO [7		If Yes, fill in i	nformatio	nn helow		
Citation	ONO TO AD					Citation		!			J. 1 20,011		
Туре		Citation			$\neg \mid$	Туре			Citatio	1			
FR		262.34(a)(3	3)		_		9						
			-										
VIOLATION	⊠ Add	☐ Update	☐ Dele	ete			on Miller Southful		Link to Abo	ve Evalua	ition 🛚		
Seq. No	Seq. No Violation Agency					Retui					_		
	265 I S												
Notes:								71010	arrivo Bato.				
Seq. No Type Agency (mm/dd/yyyy) Qualifier (mm/dd/yyyy) 265 I S 11/6/2007 O A RTC Qualifier is required if entering an Actual RTC Date. Notes: LINK CITATIONS TO ABOVE VIOLATION? YES NO If Yes, fill in information below Citation Type Citation Type Citation Type Citation													
	K CITATIONS TO ABOVE VIOLAT ation Citation			•				Citatio	ion				
FR		265.173(a)			$\neg \bot$								

	11. 11. 11. 11. 11. 11. 11. 11. 11. 11.	HANDI	ER SECT	ION /		ot if DCD/	Man	latifi	ior)				
Handler Nam		ПАПИ	ER SECT	ION (F	- <i>111</i>	Conta	N - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	louii	ler)				
Street						Oonta							
City					State	1		1	Zip Code				
County													
	UN	IVERSE CHA	NGE SEC	TION (Fill o	ut if Univ	erse Ch	ang	e Required)				
i. Indicate th	ne Facility's c	urrent Univers	e(s):										
ii. Indicate the Note: All TSD accentage to the made of the made of the second	tivity changes n	Info Generator nust be handled b				Non-Ha			SQG Closed	CEG			
				Tra	anspo	orter 🗌			Non-T	ransporter	· 🔲		
iii. Indicate th (Only fill out if to transporter stat	he facility requ				ranspo	necked, you i ortation belov ater		k at	Check non-transporter if the facility is currently listed in RCRAInfo as a transporter AND no longer transports				
			Highw	ay L	0	her			naza	rdous was	te.		

^{*}Required Fields



Inspection Date	11/06/2007
Time Start	Commence and the contract of t
Time Finish	-

HAZARDOUS WASTE	INSPECTION REPORT
⊠ GENERATOR	S Q GENERATOR

Company name <u>Lyondell Chemical Company</u>	
EPA I.D. Number <u>PAD046538211</u>	Employer I.D. Number (EIN)
Site Address 3801 West Chester Pike-Newton	vn Square, PA 19073
County Delaware Mu	nicipality Newtown Township Zip 19073
Name of Inspector <u>Jason Oseredzuk</u>	
Name & Title of Responsible Official Mr. Thor	nas Baker-Principal Environmental Engineer
Person Interviewed SAA	Telephone (<u>610</u>) <u>359-2432</u>
Mailing Address (if different from above)	
Amount of Hazardous Waste Generated per l	
1. Site Characterization:	
STORAGE: 🛛 Container 🖾 Tanks	Containment Bldg. Drip Pad Other
PBR: Neutralization/WWTP	Reclaim Other
GENERATOR TREATMENT Contain	ners
2. Universal Waste: 🔲 Large Quantity Ha	ndler Small Quantity Handler
Universal Waste Types Flourescent	amps, batteries
3. Hazardous Waste Transporters:	
Transporter Name <u>Veolia ES Technic</u>	al Solutions License Number PA-AH 0500
Transporter Name <u>Dart Trucking Con</u>	
	nsport Group, Inc. License Number (NJ) 7107
	ed and destination facility (location & type).
, , , ,	

SEE 2005 HAZARDOUS WASTE BIENNIAL REPORT FOR FULL DETAILS

Waste Code	Waste Description	Destination Facility
D001	Waste Flammable Liquids (propylene-oxide, methanol)	Veolia ES Technical Solutions OHD093945293
F003,D001	Waste Flammable Liquids (methanol)	Veolia ES Technical Solutions OHD093945293
F003,D001	Waste Flammable Liquids (acetone, isopropanol)	Veolia ES Technical Solutions OHD093945293
D001,F003,F005	Waste Flammable Liquids; Toxic (acetone, chloroform)	Veolia ES Technical Solutions OHD093945293
D001	Waste Oxidizing Liquid	Veolia ES Technical Solutions NJD980536593
D001	Waste Corrosive Liquid; flammable	Veolia ES Technical Solutions NJD980536593
F003,F005,D001	Waste Toxic Liquid (ally! alcohol, acetone)	Veolia ES Technical Solutions NJD980536593
D001	Waste Aerosols; Flammable (petroleum hydrocarbons)	Veolia ES Technical Solutions TXD000838896

HAZARDOUS WASTE INSPECTION REPORT **GENERATORS -- SMALL QUANTITY GENERATORS**

Site Name Lyondell Chemical Company ID Number PAD046538211 Date 11/06/2007

1 - No Violation Observed 2 - Not Applicable 3 - Not Determined 4 - Non Compliance

STATUS

1	2	3	4	REQUIREMENT	PA CIT. 25 PA Code	FED. CIT. 40 CFR	LINE NO.
Χ				Hazardous waste determination performed on all waste streams	262a.10	262.11	H001
Х				Identification Number	262a.10	262.12	H002
X				Authorized transporters only	262a.10	262.12(c)	H003
Х				Subsequent notification requirements met	262a.12(b)		H004
х				Proper manifest used	262a.10	262.21	H005
Х				Manifests filled out correctly and completely	262a.20		H006
Х				Manifests signed and routed properly	262a.23(a)	262.23	H007
X				Generator waste accumulated on site for 90 days or less	262a.10	262.34(a)	H008
_	Х			SQG waste accumulated on site for 180 days max unless 200 mile distance rule applies - 270 days	262a.10	262.34(e)(f)	H009
	Х			SQG waste accumulated on-site never exceeds 6000 kg	262a.10	262.34(e)(f)	H010
х				Satellite accumulation requirements complied with	262a.10	262.34(c)	H011
х				Personnel training program per 265.16 complied with	262a.10	262.34(a)(4) 262.34(d)	H012
Х				Manifest exception and biennial reports retained for 3 years	262a.10	262.40(a)(b)	H013
х				Specified records retained for three years	262a.10	262.40(c)	H014
Х				Biennial reports submitted to the Department (LQG only)	262a.41	262.41	H015
x				Exception reporting procedures followed	262a.42	262.42	H016
х				Spill reporting procedures followed	262a.10	262.34(d)	H017
х		-		PPC plan developed and implemented	262a.10	262.34(a)	H018
X		 		Special requirements followed for international shipments	262a.10	262.50	H019
x				Source reduction strategy prepared and available (LQG only)	262a.100	262.60	H020
x				Excluded waste complies with exclusionary requirements	261a.4	261.4	H021
1							
\perp							

HAZARDOUS WASTE INSPECTION REPORT GENERATORS -- SMALL QUANTITY GENERATORS FACILITY SPECIFICS

Site Name Lyondell Chemical Company ID Number PAD046538211 Date 11/06/2007

1 - No Violation Observed 2 - Not Applicable 3 - Not Determined 4 - Non Compliance

STATUS PA CIT. FED CIT. LINE 25 PA Code 40 CFR NO. REQUIREMENT 1 2 3 4 **CONTAINERS** (Subchapter I) Containers managed in compliance with 40 CFR Part 265 262.34 H025 262a.10 Χ Subpart I and 25 PA Code Chapter 265a Subchapter I Χ Containers of hazardous waste in good condition 265a.1 265.171 H026 265a.1 H027 Χ 265.172 Containers and stored waste compatible H028 Х Containers kept closed except during addition or removal of 265a.1 265.173(a) H029 Containers managed to prevent leaks 265a.1 265.173(b) Х 265a.173 H030 Χ Container configuration and spacing insures safe management and access for inspection purposes and emergency equipment H031 Χ Container storage areas inspected at least weekly 265a.1 265.174 Special requirements for ignitable or reactive and incompatible H032 Χ 265a.1 265.176-177 waste complied with 265a.179 H033 Х Proper containment and collection systems in place 265a.1 Х Air emission standards complied with (AA, BB, CC) 265.178 H034 Χ Containers clearly marked with accumulation date and visible for 262a.10 262.34(a)(2) H035 inspection 262a.10 H036 Χ Containers labeled "Hazardous Waste" 262.34(a)(3) **SWMA** H037 Х Containers labeled accurately identify contents 6018.403(b) (2)

2540-FM-BWW0406 6/2005



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU WASTE MANAGEMENT

Inspection	ĺD	AND THE PERSONNEL PROPERTY AND AND AND ADDRESS OF THE PERSONNEL PROPERTY ADDRESS OF THE PERSONNEL PROPERTY AND ADDRESS OF THE PERSONNEL PROPERTY AND ADDRESS OF THE PERSONNEL PROPERTY ADDRESS OF THE PERSONNEL PROP
Field Code		

INSPECTION REPORT - RESIDUAL WASTE GENERATOR

Site I.D.: PAD046538211		Telephone #: 610-359-4849						
Site Name: Lyondell Chemical Company		Operator Name:						
Address: 3801 West Chester Pike		Address:						
Newtown Square, PA 19073								
Responsible Official: Mr. Thomas Baker								
Person Interviewed: SAA		Title: SAA						
Inspector: Jason Oseredzuk		Title: Solid Waste Specialist						
		SF						
Inspection Date: 1170672007 Type	e: Rountine	No. of Violations: See Report Time:						
SEE 2006 RESIDUAL WASTE	BIENNIAL F	REPORT						
Waste Description:		Waste Code:						
Treatment: Yes No Type	oe:							
Type of Storage: Containers Tai	nks 🗌 Piles	☐ Impoundments						
Disposition: Destination Facility								
		Type:						
Amount Generated:								
Amount Generated.		iz,mio.						
Waste Description:	enochdeck blomos - www.sidde.com s (fed filed on hill dishin 1883). Feld folks Wolfelin - Print fol	Waste Code:						
Treatment: Yes No Typ	oe:							
Type of Storage: Containers Tai								
Disposition: Destination Facility								
		Type.						
Amount Generated:								
Amount Generated.		io.iiiio.						
Waste Description:		Waste Code:						
	oe:							
J		Impoundments						
		Type:						
Amount Generated:		lb./mo.						
Waste Description:	n kangadagan na magamaning at ar surrama sa ta an magatama menadi semalimanin	Waste Code:						
Type of Storage: Containers Tai		· ·						
		Type:						
		1						
Amount Generated:		ID./IIIO.						

ID Number PAD046538211 Date

Site Name Lyondell Chemical Company

11/06/2007

INSPECTION REPORT - RESIDUAL WASTE GENERATOR (Cont'd)

1 - No Violation Observed 2 - Not-Applicable 3 - Not-Determined 4 - Non-Compliance

	CTA	T116		No violation observed 2 - Not-Applicable 3 - Not-Betermined				
;	ı	TUS)		COMME	NTS	CHAPTER	LINE
1	2	3	4		ATTACH	HED	CITATION	ITEM
\boxtimes				Designated facility: valid permit? Permit Number (PA)		<u> </u>	287.6	1
				Biennial report submitted by March 1 of each odd numbered year.			287.52(a)	2
\boxtimes				Written source reduction strategy on file and in effect.		oxdot	287.53	3
\boxtimes				Waste reduction strategy covers all waste streams.			287.53(b)	4
\boxtimes				Reduction strategy updated every five years or when waste manufacturing process changes.	or		287.53(c)	5
				Waste analysis performed: copy on file.			287.54	6
\boxtimes				Annual analysis or certification of waste submitted to Department a designated facility.	and		287.54(b)(f)	7
				Chemical analysis updated every five years or when waste manufacturing process changes.	or		287.54(g)	8
				Generator record keeping requirements.			287.55	9
				Operation of disposal or processing facility without a permit.			287.101(a)	10
	1			STORAGE REQUIREMENTS				
				Residual waste not mixed with hazardous waste.		TΠ	299.111(1)	11
	片岩	ዙ	₩	Waste stored as not to create a safety risk.		片-	299.111(2)	12
	H	ዙ	片	Residual waste not mixed with special handling waste.		⊨=	299.111(3)	13
	片	믐	믐	Waste not blown or otherwise deposited outside storage area.		뉴	299.111(4)	14
B	片	╁┼┤	H	Storage area inspected; records available.		片	299.111(4) 299.112(c)	15
 	┝╤┽	 	님			H	· 	16
	片片	╁╪╡	ዙ	All waste stored less than one year.		岩	299.113(a)	
X	님	ㅐ		Equipment maintained in operable condition.		⊢-	299.114(a)	17
	닊	 	님	Equipment cleaning frequencies maintained.		닠-	299.114(c)	18
	╽┷┙			Vectors controlled and minimized.	·	Щ	299.115	19
				Run on, runoff minimized; storage areas managed in accordance villean Streams Law.	vith		299.116(a)(b)	20
\boxtimes				Waste stored to prevent groundwater degradation.			299.116(c)	21
\boxtimes				Sufficient number of properly constructed storage containers.			299.121	22
\boxtimes				Storage containers labeled properly.			299.121(d)	23
\boxtimes				Storage container height and access requirements.			299.121(e)	24
\boxtimes				Storage tank design standards.			299.122	25
\boxtimes				Storage tanks labeled properly.			299.122(a)	26
\boxtimes				No putrescible waste or liquid waste stored in piles.			299.112(d), 299.131(b)	27
				Waste storage pile area properly designed, constructed and maintained.			299.131	28
	\boxtimes			Storage pad or liner system properly designed and maintained.			299.132	29
	\boxtimes			Proper design and maintenance of leachate and runoff control systems.			299.133	30
	Ø			Proper storage and containment of incinerator ash residue.			299.151	31
	図			Proper storage and containment of friable asbestos containing waste.			299.152	32
	図			Proper storage and containment of coal ash.		币	299.153	33
Ø				Proper storage and containment of PCB containing waste material.		Ħ	299.154	34
	X	Ħ	Ī	Proper storage of whole and processed tires.		Ħ	299.155	35
				- to a second se	·	П	1	1
	Ī		Ī			Ħ	A STATE OF THE COURSE PROOF TO COME AND ADMINISTRATION ADMINISTRATION AND ADMINISTRATION ADMINISTRATION ADMINISTRATION ADMINISTRATION AND ADMINISTRATION ADMINISTRAT	T
m	Ħ	Ħ	Ħ			Ħ		
H	Ħ	Ħ	Ħ			H		
H	H	H	H			H-		
片러	片	H	H			屵		
 	井	+=	H			ឣ		-
						<u> </u>		

2540-FM-LRWM0425 Rev. 8/2001



COMMONWEALTH OF PENNSYLVAMIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Inspection	ID	

Field Code	
------------	--

INSPECTION REPORT INFECTIOUS OR CHEMOTHERAPEUTIC WASTE GENERATOR

Site I.D.: PAL	046538211	Telephone #: 610-359-4			
	ondell Chemical Company	Operator Name:			
	1 West Chester Pike	Address:			
	town Square, PA 19073				
	Newtown Township	County: Delaware		-1 F	
	Official: Mr. Thomas Baker	Title: Principal Environm	<u>ient</u>	al Engineer	
	ewed: SAA	Title: SAA Title: Solid Waste Speci	alic	•	
	son Oseredzuk e: 11/06/2007	#\/:-			
•					
	: PF SF				
Comment:					
	ate: 11 /06 / 2007 Type: Routine				
Permit Expira	tion Date: / / Days/Week Operated	: _7 days/week	Ma	x. Daily Volume:	
Infectious and	chemotherapeutic waste generated:	k	g/m	onth	
	1 - No Violation Observed 2 - Not-Applicable 3 - N		n-C	Compliance	
	· · · · · · · · · · · · · · · · · · ·		Ī		
STATUS	DECLUDEMENT	COMMEN	- 1	CHAPTER CITATION	LINE
1 2 3 4	REQUIREMENT	ATTACHE	D		
	Storage in compliance with §§ 284.401-284.419.	L.	_	284.401	1
	BASIC STORAGE		-	221	
	Integrity of containers maintained, leakage and releases			284.411(a)(1)	2
	Spread of infectious agents prevented; vectors controlled		_	284.411(a)(2),(3)	3
				4	
Unauthorized access to waste prevented; enclosures and containers 284.411(a)(6)(i) 5 secured.					
Enclosures or containers marked with prominent warning signs.					
	Enclosures capable of being readily maintained in a sani	tary condition.		284.411(b)	7
	Infectious and chemotherapeutic waste not commingled	with other waste.		284.411(c)	8
	SORTING				
	Infectious and chemotherapeutic waste placed in sepa other waste at the point of origin.	rate containers from		284.412(a)	9
	Infectious and chemotherapeutic waste stored together i only with Department approval.	n the same container		284.412(b)	10
	Infectious and chemotherapeutic waste sorted properly and each class of waste placed in a separate container	y according to class,		284.412(d)(1)-(3) (e)(1)-(3)	11
	DURATION OF STORAGE				
	Infectious waste stored for no longer than 30 days at roo	m temperature.		284.413(a)(1),(2)	12
	Infectious waste stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for no longer than 90 days in a front in the stored for t			284.413(a)(3)	13
	Putrescent infectious waste moved off-site within 24 hour			284.413(b)	14
	Infectious waste sharps managed according to 284.411			284.413(c)	15

Site Name ID Number Date

Lyondell Chemical Company
PAD046538211
11/06/2007

INSPECTION REPORT INFECTIOUS OR CHEMOTHERAPEUTIC WASTE GENERATOR (Cont'd)

1 - No Violation Observed 2-Not-Applicable 3-Not-Determined 4-Non-Compliance

				1-140 Violation Observed 2-Not-Applicable 0 Not Determined .				
i		TU 3		REQUIREMENT COMM		CHAPTER CITATION	LINE ITEM	
	STORAGE CONTAINERS							
\boxtimes				Infectious and chemotherapeutic waste stored in proper containers		284.415(a)(1)-(3)	16	
\boxtimes				Used sharps stored in proper containers.		284.415(b)(1)-(3)	17	
\boxtimes				Infectious and chemotherapeutic waste fluids stored in proper containers.		284.415(c)(1)(2)	18	
\boxtimes				Double bagging employed when bags are the only storage container. Bags meet strength and certification requirements.		284.415(d)(1)-(4)	19	
\boxtimes				Yellow bags used for chemotherapeutic waste; red bags used for infectious waste.		284.415(d)(5)	20	
Ø				Protective clothing worn by persons packaging infectious or chemotherapeutic waste for offsite shipment.		284.415(f)	21	
		1	J	MARKING OF CONTAINERS		<u> </u>		
\boxtimes				Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label.		284.416(a),(b)	22	
\boxtimes				Outermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste."		284.416(c)	23	
\boxtimes				Labeling information colored red for infectious waste, yellow for chemotherapeutic waste, with contrasting color backgrounds.		284.416(d)	24	
				Stationery containers lined with appropriately colored bag.		284.416(e)	25	
		J	.l	REUSE OF CONTAINERS		<u> </u>		
\boxtimes				Nonrigid containers not reused.		284.417(a)	26	
Ø				Corrugated fiberboard containers reused only if container protected from waste.		284.417(b)	27	
Ø				Rigid, nonfiberboard containers reused only if container protected from waste or container has been decontaminated by approved means.		284.417(c)(1)(2)	28	
\boxtimes				Rigid containers used to store chemotherapeutic waste reused only if container protected from waste.		284.417(d)	29	
				MANIFESTING				
\boxtimes				Manifest prepared as required.		284.712(a)-(e)	30	
\boxtimes				Exception reporting conducted as required.		284.714(a)-(c)	31	
\boxtimes				Manifest copies maintained for at least 5 years.		284.703(b)	32	
					-	4 17 10 10 10 10 10 10 10 10 10 10 10 10 10		
H	H	H	H		片			
Ħ			H		Ħ			
님	Ц	H						
اليسا	إليا	ليا	لياز		لبا	L	l	

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of Inspection	11/06/2007	Identification	Number_ PAD046538211
Company/Facility/Site	Name Lyondell	Chemical Company	
and Residual Waste and Intercompany located in Newton Engineer, was present for the for petrochemicals, fuels and Hazardous waste is standard labs, larger bays language generated through satellite labeled with the words "hawaste accumulation contains the main storage areas to be next hazardous waste shipmand are therefore under the areas are outside of the built requirements. In one such waste was observed without 262.34(a)(3). Mr. Baker do none container being used for 40 CFR 265.173(a). Mr. The main hazardous impervious and any spilled materials cabinets are used waste containers were observed on this containment and collection.	fectious or Chemotherape own Township, Delaware the facility. Lyondell Chemotherape on the facility. Lyondell Chemotherape of the facility. Lyondell Chemotherape of the facility. Lyondell Chemotherape of the facility of the facility of the facility of the operator of the consolidated in drums of the facility of the operator of the operator of the operator of the facility of the waste is gestorage area, a bag contains at an accumulation start do ated the waste during the for the accumulation of haz Baker closed the containes waste storage pad was of material will drain to a buffor the storage of lab pacteries well. All residual was waste storage pad exists a pad on the day of inspecting system. The aboveground	utic Waste Generator County. Mr. Thomas mical Company is a R sthroughout the facility and pilot plants. Haves. All satellite accumber words that identify earby waste collection or stored as lab pack was consolidation areas are the process generating lab pack material at evisible for inspection are during the inspection that it is a consolidation areas are the process generating the process generating lab pack material at evisible for inspection are during the inspection beardous waste was obser during the inspection bear during the inspection and dated. The store aste containers were of near the facility's Pilotion. This storage paded storage tank for the	nulation containers were properly by the contents. Full hazardous areas and will be taken to one of aste to be categorized during the eat or near the point of generation generation generation generation at the waste, some consolidation efore subject to 90 storage as properly labeled as hazardous on, contrary to 40 CFR recting the violation. In Bay 4, were without a lid, contrary to the concrete pad has been made on and remediation. Flammable aiting disposal. All hazardous rage area is used for the storage of bserved to be properly labeled. of Plant Building. No hazardous
Department. This report is Additional natification of violations identified as a This report does not of contained herein shall be of herein.	e formal notification of an violations may be issued a result of review of labora constitute an order or othe deemed to grant or imply in	ny violations observed concerning either viels atory analyses or Depa er appealable action c mmunity from legal act	ations noted hersin, or other rtment records. I the Department. Nothing ion for any violation noted
Signature by the perso report, but does acknowledg	on interviewed does not ne- ge that the person was sho 3 / 2	cessarily imply concur wp the report or that .	rence with the findings on this a copy was left with the person.
Person interviewed	(signature)	nug Baker	
Inspector (signature	e) (fam) (ja	outjule _	Date ///00//00/
		v	Page f of 7

ER-WM-129: Rev. 7/95

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of Inspection 11/06/2007 Identification Number PAD046538211
Company/Facility/Site Name
stream as non-contact process water that is discharged to DELCORA under a discharge permit with monitoring conditions. The drug testing room was visited, and one properly labeled and lined infectious was container was observed. Hazardous waste, residual waste and infectious waste manifests were reviewed and were found to be complete and properly maintained. The 2005 Hazardous Waste Biennial Report, 2006 Residual Waste Biennial Report and 2006 Chemical Analysis Report (26R) were briefly reviewed. Mr. Baker detailed the process for hazardous waste management annual training and displayed the content of the training program as well as the list of employess that received the training last year. Training will be conducted next month for 2007. The weekly hazardous/residual waste storage area inspection records were reviewed and were found to be complete. The facility's PPC Plan, last revised in July 2005 was reviewed. The facility's hazardous/residual waste Source Reduction Strategy was briefly reviewed.
No other violations were noted.
This inspection report is notice of the findings of an inspection conducted by a representative of the Department. This report is formal notification of any violations observed during the inspection. Additional notification of violations may be issued concerning either violations noted herein, or other violations identified as a result of review of laboratory analyses or Department records. This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein.
Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.
Person interviewed (signature) Junus Paker Date 11/06/2007
Inspector (signature) Gam Beachale Date 1/00/3007
Page 7 of 9



Inspection Date	02/08/2006
Time Start	
Time Finish	

HAZARDOUS WASTE INSPECTION REPORT ☐ S Q GENERATOR

Company name Lyondell Chemical	Company	I.D. Number <u>PAD046538211</u>
Site Address 3801 West Chester Pi	ike	
County Delaware	Municipality Newtown Town	nship Zip 19073
Name of Inspector Melissa Rose ar	nd Joseph Vitello	
Name & Title of Responsible Officia	al <u>Thomas Baker - Health, Safety, a</u>	and Environmental Supervisor
Person Interviewed Thomas Baker		Telephone (610) 359-4849
Mailing Address (if different from at	oove) 3801 West Chester Pike, Nev	wtown Square, PA 19073
Amount of Hazardous Waste Gene	rated per Month: >>2,200	PoundsK
1. Site Characterization:		
STORAGE: Container	☐ Tanks ☐ Containment Bldg.	Drip Pad Other
PBR: Neutralizatio	n/WWTP Reclaim	Other
GENERATOR TREATMENT	☐ Containers ☐ Tanks	Containment Bldg. Drip Pa
2. Universal Waste: Large C	Quantity Handler Small Qua	antity Handler
Universal Waste Types Flu	uorescent bulbs	
3. Hazardous Waste Transporte	rs:	
Transporter Name Onyx En	vironmental Services	License Number PA-AH 0500
Transporter Name Dart Tru	cking Company, Inc.	License Number PA-AH 0219
Transporter Name Environ	Transport Group, Inc.	License Number (NJ) 7107
A Types of hazardous waste de	onerated and destination facility /	location & type)

Types of hazardous waste generated and destination facility (location & type).

Waste Code	Waste Description	Destination Facility
F003	Waste flammable liquids (acetone, methyl alcohol)	Onyx Environmental Services, OHD093945293
F003	Waste flammable solids, toxic (acetone, chloroform)	Onyx, OH
F003	Waste toxic (allyl alcohol, toluene diisocyanate)	Onyx, NJ
D001	Waste flammable liquids (Acetaldehyde, methanol) (propylene oxide)	Onyx, OH
D001	Waste propylene, isobutylene, n-butane)	Onyx, NJD980536593

Page _____ of _____

HAZARDOUS WASTE INSPECTION REPORT GENERATORS -- SMALL QUANTITY GENERATORS

Site Name Lyondell Chemical Compar	ny ID N umber	PAD046538211	Date <u>02/08/2006</u>
1 - No Violation Observed	2 - Not Applicable	3 - Not Determined	4 - Non Compliance

STATUS

4	A I U:	3	4	DECHIDEMENT	PA CIT.	FED. CIT.	LINE
	<u>2</u>	<u>,</u>		REQUIREMENT Hazardous waste determination performed on all waste	25 PA Code 262a.10	40 CFR 262.11	NO. H001
				streams	4		
	\Box			Identification Number	262a.10	262.12	H002
				Authorized transporters only	262a.10	262.12(c)	H003
\boxtimes				Subsequent notification requirements met	262a.12(b)		H004
M				Proper manifest used	262a.10	262.21	H005
\boxtimes				Manifests filled out correctly and completely	262a.20		H006
\boxtimes				Manifests signed and routed properly	262a.23(a)	262.23	H007
\boxtimes				Generator waste accumulated on site for 90 days or less	262a.10	262.34(a)	H008
				SQG waste accumulated on site for 180 days max unless 200 mile distance rule applies - 270 days	262a.10	262.34(e)(f)	H009
	\boxtimes			SQG waste accumulated on-site never exceeds 6000 kg	262a.10	262.34(e)(f)	H010
				Satellite accumulation requirements complied with	262a.10	262.34(c)	H011
\boxtimes				Personnel training program per 265.16 complied with	262a.10	262.34(a)(4) 262.34(d)	H012
\boxtimes				Manifest exception and biennial reports retained for 3 years	262a.10	262.40(a)(b)	H013
\square				Specified records retained for three years	262a.10	262.40(c)	H014
\boxtimes				Biennial reports submitted to the Department (LQG only)	262a.41	262.41	H015
\boxtimes				Exception reporting procedures followed	262a.42	262.42	H016
\boxtimes				Spill reporting procedures followed	262a.10	262.34(d)	H017
\boxtimes				PPC plan developed and implemented	262a.10	262.34(a)	H018
	\boxtimes			Special requirements followed for international shipments	262a.10	262.50	H019
						262.60	
\boxtimes				Source reduction strategy prepared and available (LQG only)	262a.100		H020
\boxtimes				Excluded waste complies with exclusionary requirements	261a.4	261.4	H021

HAZARDOUS WASTE INSPECTION REPORT GENERATORS -- SMALL QUANTITY GENERATORS FACILITY SPECIFICS

Site Name Lyondell Chemical Company ID Number PAD046538211 Date 02/08/2006							
		1	- No	Violation Observed 2 - Not Applicable 3 - Not Determined	4 - Non Com	pliance	
STA	TUS	6			DA CIT	EED OIT	LINIT
1	2	3	4	REQUIREMENT	PA CIT. 25 PA Code	FED CIT. 40 CFR	LINE NO.
				CONTAINERS (Subchapter I)			
\boxtimes				Containers managed in compliance with 40 CFR Part 265 Subpart I and 25 PA Code Chapter 265a Subchapter I	262a.10	262.34	H025
\boxtimes				Containers of hazardous waste in good condition	265a.1	265.171	H026
\boxtimes				Containers and stored waste compatible	265a.1	265.172	H027
X				Containers kept closed except during addition or removal of wastes	265a.1	265.173(a)	H028
\boxtimes				Containers managed to prevent leaks	265a.1	265.173(b)	H029
\boxtimes				Container configuration and spacing insures safe management and access for inspection purposes and emergency equipment	265a.173		H030
\boxtimes				Container storage areas inspected at least weekly	265a.1	265.174	H031
\boxtimes				Special requirements for ignitable or reactive and incompatible waste complied with			
\boxtimes				Proper containment and collection systems in place	265a.179		H033

Air emission standards complied with (AA, BB, CC)
Containers clearly marked with accumulation date and

Containers labeled accurately identify contents

Containers labeled "Hazardous Waste"

visible for inspection

265a.1

262a.10

262a.10

SWMA

(2)

6018.403(b)

265.178

262.34(a)(2)

262.34(a)(3)

H034

H035

H036

H037

2540-FM-LRWM0406 Rev. 10/2001



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION 3UREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Inspection	ID	•
Field Code		

INSPECTION REPORT - RESIDUAL WASTE GENERATOR

Site I.D.: PAD046538211 Site Name: Lyondell Chemical Company Address: 3801 West Chester Pike, Newtown Square, PA 1 Municipality: Newtown Township Responsible Official: Person Interviewed: Thomas Baker Inspector: Melissa Rose and Joseph Vitello eFACTS ID #: PF	Operator Name: 9073 Address: County: Delaware Title: Title: Environmental Supervisor Title: Waste Management Specialist SF
Inspection Date: 02 /08 / 2006 Type: routine	No. of Violations: 0 Time:
Treatment: Yes No Type:	
Type of Storage: Containers Tanks Piles Disposition: Destination Facility	-
Location:	
Amount Generated:	lb./mo.
Waste Description:	Waste Code:
Type of Storage: Containers Tanks Piles Disposition: Destination Facility	
Location:	
Amount Generated:	lb./mo.
Waste Description:	Waste Code:
Type of Storage: Containers Tanks Piles Disposition: Destination Facility	
Location:	
Amount Generated:	lb./mo.
Waste Description:	Waste Code:
Treatment: Yes No Type:	
Type of Storage: Containers Tanks Piles Disposition: Destination Facility	
Location:	
Amount Generated:	lb./mo.

Site Name ID Number Date Lyondell Chemical Company

PAD046538211 02/08/06

INSPECTION REPORT - RESIDUAL WASTE GENERATOR (Cont'd)

1 - No Violation Observed 2 - Not-Applicable 3 - Not-Determined 4 - Non-Compliance

STATUS		S		CHAPTER	LINE		
1 2 3 4		4	GENERAL REQUIREMENTS ATTACK		CITATION	ITEM	
X			П	Designated facility: valid permit? Permit Number (PA)	П	287.6	1
	H	H	H	Biennial report submitted by March 1 of each odd numbered year.	Ħ	287.52(a)	2
X	片	H	H	Written source reduction strategy on file and in effect.	Ħ	287.53	3
X	H	H	H	Waste reduction strategy covers all waste streams.	一	287.53(b)	4
	H	H	H	Reduction strategy updated every five years or when waste or	Ħ	287.53(c)	5
	ш			manufacturing process changes.	نــا	207.00(0)	
\boxtimes				Waste analysis performed: copy on file.		287.54	6
				Annual analysis or certification of waste submitted to Department and designated facility.		287.54(b)(f)	7
\boxtimes				Chemical analysis updated every five years or when waste or		287.54(g)	8
157				manufacturing process changes.		287.55	9
X	Щ		Щ	Generator record keeping requirements.	H		10
\boxtimes	Ш	Ш		Operation of disposal or processing facility without a permit.		287.101(a)	10
				STORAGE REQUIREMENTS			
\boxtimes				Residual waste not mixed with hazardous waste.		299.111(1)	11
Ø	П		П	Waste stored as not to create a safety risk.		299.111(2)	12
Ø		П		Residual waste not mixed with special handling waste.		299.111(3)	13
X	Ħ	F		Waste not blown or otherwise deposited outside storage area.		299.111(4)	14
X		I		Storage area inspected; records available.		299.112(c)	15
বি	Ħ	H	H	All waste stored less than one year.		299.113(a)	16
X	H	H	H	Equipment maintained in operable condition.	n	299.114(a)	17
M	H	H	H	Equipment cleaning frequencies maintained.	m	299.114(c)	18
X	H	H		Vectors controlled and minimized.	Ħ	299,115	19
X	H	H	H	Run on, runoff minimized; storage areas managed in accordance with	H	299.116(a)(b)	20
KZI				Clean Streams Law.		2001110(0)(0)	
X	П		П	Waste stored to prevent groundwater degradation.		299.116(c)	21
X	M	Ħ	П	Sufficient number of properly constructed storage containers.		299.121	22
X	T	m	M	Storage containers labeled properly.		299.121(d)	23
X		Ħ	Ħ	Storage container height and access requirements.	Ħ	299.121(e)	24
1	H	H	Ħ	Storage tank design standards.		299.122	25
Ž	H	Ħ	H	Storage tanks labeled properly.	П	299.122(a)	26
X	H	H	H	No putrescible waste or liquid waste stored in piles.	Ħ	299.112(d),	27
						299.131(b)	
	X	П		Waste storage pile area properly designed, constructed and maintained.		299.131	28
Ħ		Ħ	Ħ	Storage pad or liner system properly designed and maintained.	Ħ	299.132	29
Ħ	X	H	H	Proper design and maintenance of leachate and runoff control systems.	Ħ	299.133	30
Ħ	X	H	H	Proper storage and containment of incinerator ash residue.	Ħ	299.151	31
H	X	17	H	Proper storage and containment of friable asbestos containing waste.	Ħ	299.152	32
Ħ	X	H	H	Proper storage and containment of masic assesses containing waste.	声	299.153	33
X	H	H	H	Proper storage and containment of PCB containing waste material.	H	299.154	34
H	H	H	H	Proper storage of whole and processed tires.	౼	299.155	35
H			-	Troper storage of whole and processed thes.	H	233.133	100
H	+	H	H		 		
님	믬		H		-		-
H	님	-	닊		ឣ		+
4		<u> </u>	님		H		-
닠			Щ				
	닏		Щ		님.		
					\sqcup		



Inspection	ID	 ٠

Fie	ld i	Cod	e	
	ıu '	\sim \sim \sim	C	

INSPECTION REPORT INFECTIOUS OR CHEMOTHERAPEUTIC WASTE GENERATOR

Site I.D.: PAD046538211		Telephone #: 610-359-4849			
Site Name: Lyondell Chemical Company	Operator Name:	Operator Name:			
Address: 3801 West Chester Pike, Newtown Square, PA 19073	Address:				
Municipality: Newtown Township	County: Delaware				
Responsible Official:	Title:				
Person Interviewed: Thomas Baker	Title: Environmental Supe	rvisor			
Inspector: Melissa Rose and Joseph Vitello	Title: Waste Management	Specialist			
Inspection Date: 02/08/06	# Violation: 0				
eFACTS ID #: PF	SF				
Comment:					
Inspection Date: 02 /08 / 06 Type: routine	Results: 0 violations	Resolved: / /			
Permit Expiration Date: / / Days/Week O					
Infectious and chemotherapeutic waste generated: 1 box/month	ר kg/	month			
1 - No Violation Observed 2 - Not-Applicable	e 3 - Not-Determined 4 - Non	-Compliance			
STATUS		CHAPTER	LINE		
1 2 3 4 REQUIREME	NT COMMENTS ATTACHED	CITATION	ITEM		
Storage in compliance with §§ 284.401-284.419.		284.401	1		
BASIC STORAG					
☐ ☐ Integrity of containers maintained, leakage and re	eleases prevented.	284.411(a)(1)	2		
Spread of infectious agents prevented; vectors controlled.					
	☐ Waste maintained in a nonputrescent state; odors prevented. ☐ 284.411(a)(4),(5)				
Unauthorized access to waste prevented; secured.	enclosures and containers	284.411(a)(6)(i)	5		
	Enclosures or containers marked with prominent warning signs. 284.411(a)(6)(ii) 6				
□ □ □ Enclosures capable of being readily maintained i	n a sanitary condition.	284.411(b)	- American		
□ □ □ Infectious and chemotherapeutic waste not comment	mingled with other waste.	284.411(c)	8		
SORTING					
Infectious and chemotherapeutic waste placed other waste at the point of origin.	in separate containers from	284.412(a)	9		
□ □ □ □ Infectious and chemotherapeutic waste stored to only with Department approval.	ogether in the same container	284.412(b)	10		
	Infectious and chemotherapeutic waste sorted properly according to class, and each class of waste placed in a separate container				
DURATION OF STOP	RAGE	(e)(1)-(3)			
☑ ☐ ☐ ☐ Infectious waste stored for no longer than 30 day	Infectious waste stored for no longer than 30 days at room temperature. 284.413(a)(1),(2) 12				
☑ ☐ ☐ Infectious waste stored for no longer than 90 day	Infectious waste stored for no longer than 90 days in a freezer 284.413(a)(3) 13				
Putrescent infectious waste moved off-site within	Putrescent infectious waste moved off-site within 24 hours 284.413(b) 14				
☑ ☐ ☐ Infectious waste sharps managed according to 2	Infectious waste sharps managed according to 284.411				
	The state of the s				

Site Name ID Number Date

Lyondell Chemical Company
PAD046538211

02/08/06

INSPECTION REPORT INFECTIOUS OR CHEMOTHERAPEUTIC WASTE GENERATOR (Cont'd)

				1 - No Violation Observed 2-Not-Applicable 3-Not-Determined	-14011-	Compliance	La reduce de la com		
200	57	TL 3	IS 4		WENTS CHED	CHAPTER CITATION	LINE		
			di ini	STORAGE CONTAINERS					
\boxtimes				Infectious and chemotherapeutic waste stored in proper containers		284.415(a)(1)-(3)	16		
\boxtimes				Used sharps stored in proper containers.		284.415(b)(1)-(3)	17		
\boxtimes				Infectious and chemotherapeutic waste fluids stored in proper containers.		284.415(c)(1)(2)	18		
\boxtimes				Double bagging employed when bags are the only storage container. Bags meet strength and certification requirements.		284.415(d)(1)-(4)	19		
\boxtimes				Yellow bags used for chemotherapeutic waste; red bags used for infectious waste.		284.415(d)(5)	20		
\boxtimes				Protective clothing worn by persons packaging infectious or chemotherapeutic waste for offsite shipment.		284.415(f)	21		
	_	L	-	MARKING OF CONTAINERS					
\boxtimes				Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label.		284.416(a),(b)	22		
Ø				Outermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste."		284.416(c)	23		
\boxtimes				Labeling information colored red for infectious waste, yellow for chemotherapeutic waste, with contrasting color backgrounds.		284.416(d)	24		
\boxtimes				Stationery containers lined with appropriately colored bag.		284.416(e)	25		
	-		I	REUSE OF CONTAINERS		1			
\boxtimes				Nonrigid containers not reused.		284.417(a)	26		
\boxtimes				Corrugated fiberboard containers reused only if container protected from waste.		284.417(b)	27		
\boxtimes				Rigid, nonfiberboard containers reused only if container protected from waste or container has been decontaminated by approved means.		284.417(c)(1)(2)	28		
لحا	Ē			Rigid containers used to store chemotherapeutic waste reused only if container protected from waste.		284.417(d)	29		
				MANIFESTING					
\boxtimes				Manifest prepared as required.		284.712(a)-(e)	30		
\boxtimes				Exception reporting conducted as required.		284.714(a)-(c)	31		
\boxtimes				Manifest copies maintained for at least 5 years.		284.703(b)	32		
닉	닉				ᆜ.				
님	Н	H	H		<u> </u>				
H	H	H	H		-#-				
		H							
			Ō						

ER-WM-129: Rev. 7/95

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of	Inspection	February 8,	2006	Identification	Number	PAD046538211
Company	/Facility/Si	te Lyondell	Chemical	Company		

A routine inspection of the hazardous, residual, and infectious waste handling methods at Lyondell Chemical Company, located in Newtown Township, Delaware County, was conducted on February 8, 2006 by Melissa Rose and Joseph Vitello, Waste Management Specialists, of the Department. Mr. Thomas Baker, Health, Safety, and Environmental Supervisor, was present for Lyondell.

A walk-around tour of the facility was lead by Mr. Baker. The Newtown Lyondell site is a Research and Development facility for their parent Lyondell chemical company. They are listed as a large quantity generator (LQG) of hazardous waste with EPA ID# PAD046538211.

Hazardous waste is generated primarily in satellite accumulation containers from lab wastes from their R&D operation. Lyondell operates "bay" lab areas of their B and E buildings. Several "lab banks" and bay areas (bays 2, 3, 4, 5, 6, and pilot bay areas 2, 3, and 4) were inspected. All hazardous waste satellite accumulation containers were properly labeled with Lyondell hazardous waste tags. These containers are primarily glass chemical bottles and jugs, and when they are full, they are dated and placed in the nearest satellite collection "pick up" area, to again be collected (usually 3 times a week) by a member of the hazardous waste team to be consolidated into drums or labpacks, and placed in one of the main storage areas.

The main hazardous and residual waste storage area outside of the B building was inspected. It was properly labeled and had proper containment. All hazardous drums were labeled and dated correctly; the oldest drum was dated 01/18/06. Lyondell operates a glass-crushing machine in this area as well. Crushed glass and consolidated lab trash are placed into residual waste drums.

The smaller storage area outside of the E building was observed. It was properly labeled and had proper containment. No waste was observed in this area.

Lyondell's aboveground residual wastewater tank was observed. It was properly labeled "residual waste" and "waste water," in compliance with the PA Residual Waste Regulations. The water is discharged

This inspection report is notice of the findings of an inspection conducted by a representative of the
Department. This report is formal notification of any violations observed during the inspection.
Additional notification of violations may be issued concerning either violations noted herein, or other
violations identified as a result of review of laboratory analyses or Department records.
This report does not constitute an order or other appealable action of the Department. Nothing
contained herein shall be deemed to grant or imply immunity from legal action for any violation noted
herein.
Signature by the person interviewed does not necessarily imply concurrence with the findings on this
report, but does acknowledge that the person was shown the report or that a copy was left with the person.
Person interviewed (signature) Shunus Baken Date 2/8/06
Inspector (signature) Melion Rose Date 2/8/06

Page $\frac{5}{2}$ of $\frac{2}{2}$

ER-WM-129: Rev. 7/95

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of Inspection February 8, 2006 Identification Number PAD046538211
Company/Facility/Site Lyondell Chemical Company
daily to the local POTW per discharge permit #2DC-09-02 from DELCORA (effective July 19, 2004; expires July 18, 2008).
Infectious waste generated at the facility is from routine Lyondell employee drug tests. The drug testing room was observed. One empty red infectious waste container was observed in the room. It was lined with a red bag and was properly labeled. Stericycle makes regularly scheduled visits to Lyondell for the transport of infectious waste. Infectious waste manifests were reviewed from 2005 – present and found to be in compliance.
A paperwork review was conducted. The following items were reviewed and found to be in compliance: 2005 Chemical Analysis Report (26R), 2003 Hazardous Waste Biennial Report, 2004 Residual Waste Biennial Report, weekly inspection logs of the hazardous/residual waste storage areas, hazardous waste employee training records, Hazardous and non-hazardous waste manifests from 2005 – present, PPC Plan (last updated July 2005), and Source Reduction Strategy (last updated February 25, 2005).
No violations were noted.
This inspection report is notice of the findings of an inspection conducted by a representative of the Department. This report is formal notification of any violations observed during the inspection. Additional notification of violations may be issued concerning either violations noted herein, or other violations identified as a result of review of laboratory analyses or Department records. This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein.
Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.
Person interviewed (signature) Humas Paker Date 2/8/06
Inspector (signature) Melissa Rose Date 2/8/06
Page 9 of 9



Inspection Date	6/2/2004
Time Start	1:00 PM

Time Finish 4:00 PM

ŀ	HAZARDOUS WASTE	INSPECTION	REPORT
X	GENERATOR	SQGE	ENERATOR

Coi	mpany name <u>Lyondell C</u>	hemical Company	I.D. Number <u>PAD046538211</u>
Site	Address 3801 West Ch	nester Pike	
Co	unty Delaware	Municipality Newtown Township	Zip <u>19073</u>
	me of Inspector Melissa		
Na	me & Title of Responsible	le Official <u>Thomas Baker - Health, Safety, and E</u>	nvironmental Supervisor
Per	son Interviewed Thoma	s Baker	Telephone (610) 359-4849
Ма	iling Address (if different	t from above) 3801 West Chester Pike, Newtow	n Square, PA 19073
Am	ount of Hazardous Was	te Generated per Month: >>2,200 F	oundsKgs
1.	Site Characterization:		
	STORAGE:	tainer 🔲 Tanks 🔲 Containment Bldg. 🔲 🛭	rip Pad Other
	PBR: Neut	tralization/WWTP	Other
	GENERATOR TREATM	MENT Containers Tanks	Containment Bldg. Drip Pad
2.	Universal Waste:	Large Quantity Handler Small Quantity	Handler
	Universal Waste Ty	ypes Fluorescent bulbs	
3.	Hazardous Waste Tra	nsporters:	
	Transporter Name	Onyx Environmental Services	License Number PA-AH 0500
	Transporter Name	Dart Trucking Company, Inc.	License Number PA-AH 0219
	Transporter Name	Environ Transport Group, Inc.	License Number (NJ) 7107
4.	Types of hazardous w	vaste generated and destination facility (loca	tion & type).
	Waste Code	Waste Description	Destination Facility
	F003	Waste flammable liquids (acetone, isopropanol)	Onyx Environmental Services, OHD093945293
	F003	Waste flammable solids, toxic (acetone, chloroform)	Onyx, OH
	D001, D002, D009, D003	lab packs	Onyx, NJD000692061

Page _____ of ______

HAZARDOUS WASTE INSPECTION REPORT GENERATORS -- SMALL QUANTITY GENERATORS

Site Name Lyondell Chemical Company ID Number PAD046538211 Date 6/2/2004

1 - No Violation Observed 2 - Not Applicable 3 - Not Determined 4 - Non Compliance

STATUS

STATUS	S			PA CIT.	FED. CIT.	LINE
2	3	4	REQUIREMENT	25 PA Code	40 CFR	NO.
X 0			Hazardous waste determination performed on all waste streams	262a.10	262.11	H001
			Identification Number	262a.10	262.12	H002
			Authorized transporters only	262a.10	262.12(c)	H003
			Subsequent notification requirements met	262a.12(b)		H004
			Proper manifest used	262a.10	262.21	H005
			Manifests filled out correctly and completely	262a.20		H006
			Manifests signed and routed properly	262a.23(a)	262.23	H007
			Generator waste accumulated on site for 90 days or less	262a.10	262.34(a)	H008
			SQG waste accumulated on site for 180 days max unless 200 mile distance rule applies - 270 days	262a.10	262.34(e)(f)	H009
			SQG waste accumulated on-site never exceeds 6000 kg	262a.10	262.34(e)(f)	H010
			Satellite accumulation requirements complied with	262a.10	262.34(c)	H011
			Personnel training program per 265.16 complied with	262a.10	262.34(a)(4) 262.34(d)	H012
			Manifest exception and biennial reports retained for 3 years	262a.10	262.40(a)(b)	H013
			Specified records retained for three years	262a.10	262.40(c)	H014
			Biennial reports submitted to the Department (LQG only)	262a.41	262.41	H015
			Exception reporting procedures followed	262a.42	262.42	H016
			Spill reporting procedures followed	262a.10	262.34(d)	H017
			PPC plan developed and implemented	262a.10	262.34(a)	H018
			Special requirements followed for international shipments	262a.10	262.50 262.60	H019
			Source reduction strategy prepared and available (LQG only)	262a.100		H020
\boxtimes			Excluded waste complies with exclusionary requirements	261a.4	261.4	H021

HAZARDOUS WASTE INSPECTION REPORT GENERATORS -- SMALL QUANTITY GENERATORS FACILITY SPECIFICS

Site	e Name <u>Lyondell Chemical Company</u> ID Number <u>PAD046538211</u> Date <u>6/2/2004</u>		2004	-			
		1	- No	Violation Observed 2 - Not Applicable 3 - Not Determined	4 - Non Con	npliance	
STA	TUS 2	3	4	REQUIREMENT	PA CIT. 25 PA Code	FED CIT. 40 CFR	LINE NO.
				CONTAINERS (Subchapter I)			
\boxtimes				Containers managed in compliance with 40 CFR Part 265 Subpart I and 25 PA Code Chapter 265a Subchapter I	262a.10	262.34	H025
\boxtimes				Containers of hazardous waste in good condition	265a.1	265.171	H026
\boxtimes				Containers and stored waste compatible	265a.1	265.172	H027
- W.				Containers kept closed except during addition or removal of wastes	265a.1	265.173(a)	H028
\boxtimes				Containers managed to prevent leaks	265a.1	265.173(b)	H029
\boxtimes				Container configuration and spacing insures safe management and access for inspection purposes and emergency equipment	265a.173		H030
\boxtimes				Container storage areas inspected at least weekly	265a.1	265.174	H031
\boxtimes				Special requirements for ignitable or reactive and incompatible waste complied with	265a.1	265.176-177	H032
\boxtimes				Proper containment and collection systems in place	265a.179		H033
\boxtimes				Air emission standards complied with (AA, BB, CC)	265a.1	265.178	H034
\boxtimes				Containers clearly marked with accumulation date and visible for inspection	262a.10	262.34(a)(2)	H035
\boxtimes				Containers labeled "Hazardous Waste"	262a.10	262.34(a)(3)	H036
,.58 9 6,				Containers labeled accurately identify contents	SWMA 6018.403(b) (2)		H037

2540-FM-LRWM0406 Rev. 10/2001



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION 3UREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Inspection ID	
Field Code	

INSPECTION REPORT - RESIDUAL WASTE GENERATOR

Site I.D.: PAD046538211 Site Name: Lyondell Chemical Company Address: 3801 West Chester Pike, Newtown Square, PA 19 Municipality: Newtown Township Responsible Official: Person Interviewed: Thomas Baker Inspector: Melissa Menkevich	Operator Name: O73 Address: County: Delaware Title: Title: Environmental Supervisor Title: Waste Management Specialist
eFACTS ID #: PF	
Waste Description: see 2002 Residual Waste Biennial Report Treatment: Yes No Type:	[Impoundments
Location: Amount Generated:	1
Waste Description: Treatment: Yes No Type: Type of Storage: Containers Tanks Piles Disposition: Destination Facility	☐ Impoundments
Location: Amount Generated:	1
Waste Description: Treatment: Yes No Type:	Waste Code:
Type of Storage: Containers Tanks Piles Disposition: Destination Facility	i
Location:	
Waste Description:	Waste Code:
Treatment: Yes No Type: Type of Storage: Containers Tanks Piles Disposition: Destination Facility	☐ Impoundments
Location:	1

Date

Site Name Lyondell Chemical Company PAD046538211

6/02/04

INSPECTION REPORT - RESIDUAL WASTE GENERATOR (Cont'd)

1 - No Violation Observed 2 - Not-Applicable 3 - Not-Determined 4 - Non-Compliance

		10. P. C. P.	R (290)	No Violation Observed 2 - Not-Applicable 3 - Not-Determined 4 - N			
	STA	TUS	•	COMM	ENTS	CHAPTER	LINE
1	2	3	4	GENERAL REQUIREMENTS ATTAC		CITATION	ITEM
Ø	m	П	lП	Designated facility: valid permit? Permit Number (PA)		287.6	1
X	Ħ	Ħ	Ħ	Biennial report submitted by March 1 of each odd numbered year.		287.52(a)	2
X	H	m	Ħ	Written source reduction strategy on file and in effect.		287.53	3
X	H	H	H	Waste reduction strategy covers all waste streams.		287.53(b)	4
	H	H	H	Reduction strategy updated every five years or when waste or	П	287.53(c)	5
				manufacturing process changes.			
\boxtimes	П	\Box	П	Waste analysis performed: copy on file.		287.54	6
X	H	H	H	Annual analysis or certification of waste submitted to Department and	П	287.54(b)(f)	7
<u> </u>				designated facility.		1 ///	
\boxtimes	\Box	\Box	П	Chemical analysis updated every five years or when waste or		287.54(g)	8
~3				manufacturing process changes.		1.27	
\boxtimes	П		П	Generator record keeping requirements.		287.55	9
7			IT	Operation of disposal or processing facility without a permit.		287.101(a)	10
-				STORAGE REQUIREMENTS			
\boxtimes				Residual waste not mixed with hazardous waste.	П	299.111(1)	11
	H	H	片	Waste stored as not to create a safety risk.	H	299.111(2)	12
X	H	╁┼	 - 	Residual waste not mixed with special handling waste.	十	299.111(3)	13
윉	H	┝┽	 - 	Waste not blown or otherwise deposited outside storage area.	片	299.111(4)	14
윉		 - 	H		旹	299.112(c)	15
 	1	H		Storage area inspected; records available.	-	299.112(c)	16
兴		 - 	H	All waste stored less than one year.	井		17
X	片	片	뭐	Equipment maintained in operable condition.	-	299.114(a)	18
\boxtimes	H	H	片	Equipment cleaning frequencies maintained.	屵	299.114(c)	19
X	닏	片	₩	Vectors controlled and minimized.	井	299.115	20
\boxtimes				Run on, runoff minimized; storage areas managed in accordance with Clean Streams Law.		299.116(a)(b)	20
X			П	Waste stored to prevent groundwater degradation.		299.116(c)	21
Ø			m	Sufficient number of properly constructed storage containers.		299.121	22
\boxtimes				Storage containers labeled properly.		299.121(d)	23
-7			I	Storage container height and access requirements.		299.121(e)	24
- 	m	m	m	Storage tank design standards.	T	299.122	25
\boxtimes	m	F	H	Storage tanks labeled properly.	П	299.122(a)	26
X	I			No putrescible waste or liquid waste stored in piles.		299.112(d),	27
	_					299.131(b)	
	\boxtimes			Waste storage pile area properly designed, constructed and maintained.		299.131	28
	Ø			Storage pad or liner system properly designed and maintained.		299.132	29
	\boxtimes			Proper design and maintenance of leachate and runoff control systems.		299.133	30
Ħ	X	Ī	Ħ	Proper storage and containment of incinerator ash residue.		299.151	31
П		F		Proper storage and containment of friable asbestos containing waste.		299.152	32
Ħ	X	T	n	Proper storage and containment of coal ash.	П	299.153	33
1	X	Ħ	H	Proper storage and containment of PCB containing waste material.	Ħ	299.154	34
	\boxtimes	H	Ħ	Proper storage of whole and processed tires.	T	299.155	35
Ħ	T	Ħ	Ħ		Ħ		1
Ħ	H	H	Ħ		H		1
H	H	H	H		H		1
片	H	H	H		H		
H		H	+				
H	H	H	H		 		
H	H	Η	H		⊢		-
		ليا	Ш			<u> </u>	L



Inspection ID	
Field Code	

INSPECTION REPORT INFECTIOUS OR CHEMOTHERAPEUTIC WASTE GENERATOR

Site I.D.: PAD046538211 Telephone #: 610-359-4849				
Site Name: Lyondell Chemical Company	Operator Name:			
Address: 3801 West Chester Pike, Newtown Square, PA 19073	Address:			
	County: Delaware			
	Title:			
	Title: Environmental Sur			
	Title: Waste Manageme	nt Specialist		
	# Violation: 0			
eFACTS ID #: PF SF				
Comment:				
Inspection Date: 6 /02 / 04 Type: routine			_	
Permit Expiration Date: / / Days/Week Operated:		Max. Daily Volume:	*4:53	
Infectious and chemotherapeutic waste generated: 1 box/month	k	g/month		
1 - No Violation Observed 2 - Not-Applicable 3 - No	ot-Determined 4 - No	on-Compliance		
STATUS		CHAPTER	LINE	
1 2 3 4 REQUIREMENT	COMMEN ATTACHE	18	ITEM	
Storage in compliance with §§ 284.401-284.419.		284.401	1	
BASIC STORAGE				
☐ ☐ ☐ Integrity of containers maintained, leakage and releases p	prevented.	284.411(a)(1)	2	
□ □ □ Spread of infectious agents prevented; vectors controlled.	Spread of infectious agents prevented; vectors controlled. 284.411(a)(2),(3) 3			
	☐ Waste maintained in a nonputrescent state; odors prevented. ☐ 284.411(a)(4),(5) 4			
Unauthorized access to waste prevented; enclosure	es and containers	284.411(a)(6)(i)	5	
secured. Enclosures or containers marked with prominent warning	-i [284.411(a)(6)(ii)	6	
		=	6	
☐ ☐ ☐ Enclosures capable of being readily maintained in a sanita		☐ 284.411(b)	7	
$oxed{oxed} oxed{\Box} oxed{\Box}$ Infectious and chemotherapeutic waste not commingled w	vith other waste.	☐ 284.411(c)	8	
SORTING				
□ □ □ Infectious and chemotherapeutic waste placed in separ other waste at the point of origin.	rate containers from	284.412(a)	9	
☐ ☑ ☐ ☐ Infectious and chemotherapeutic waste stored together in only with Department approval.	the same container	284.412(b)	10	
Infectious and chemotherapeutic waste sorted properly and each class of waste placed in a separate container	according to class,	284.412(d)(1)-(3) (e)(1)-(3)	11	
DURATION OF STORAGE	***************************************		1	
☐ ☐ ☐ Infectious waste stored for no longer than 30 days at room	n temperature.	284.413(a)(1),(2)	12	
☐ ☐ ☐ Infectious waste stored for no longer than 90 days in a fre		284.413(a)(3)	13	
Putrescent infectious waste moved off-site within 24 hours	· · · · · · · · · · · · · · · · · · ·	284.413(b)	14	
☐ ☐ ☐ Infectious waste sharps managed according to 284.411		284.413(c)	15	

Site Name ID Number Date Lyondell Chemical Company PAD046538211 6/02/04

INSPECTION REPORT INFECTIOUS OR CHEMOTHERAPEUTIC WASTE GENERATOR (Cont'd)

1 - No Violation Observed 2-Not-Applicable 3-Not-Determined 4-Non-Compliance

100	2.50	TL	S 4	COMM REQUIREMENT ATTAC		CHAPTER CITATION	LINE
		*	12	STORAGE CONTAINERS	V.114.0		
\boxtimes				Infectious and chemotherapeutic waste stored in proper containers		284.415(a)(1)-(3)	16
\boxtimes				Used sharps stored in proper containers.		284.415(b)(1)-(3)	17
\boxtimes				Infectious and chemotherapeutic waste fluids stored in proper containers.		284.415(c)(1)(2)	18
X				Double bagging employed when bags are the only storage container. Bags meet strength and certification requirements.		284.415(d)(1)-(4)	19
\boxtimes				Yellow bags used for chemotherapeutic waste; red bags used for infectious waste.		284.415(d)(5)	20
Ø				Protective clothing worn by persons packaging infectious or chemotherapeutic waste for offsite shipment.		284.415(f)	21
	_	1		MARKING OF CONTAINERS			
Ø				Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label.		284.416(a),(b)	22
Ø				Outermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste."		284.416(c)	23
X				Labeling information colored red for infectious waste, yellow for chemotherapeutic waste, with contrasting color backgrounds.		284.416(d)	24
\boxtimes				Stationery containers lined with appropriately colored bag.		284.416(e)	25
		• • • • • • • • • • • • • • • • • • • •		REUSE OF CONTAINERS			
\boxtimes				Nonrigid containers not reused.		284.417(a)	26
\boxtimes				Corrugated fiberboard containers reused only if container protected from waste.		284.417(b)	27
\boxtimes				Rigid, nonfiberboard containers reused only if container protected from waste or container has been decontaminated by approved means.		284.417(c)(1)(2)	28
\boxtimes				Rigid containers used to store chemotherapeutic waste reused only if container protected from waste.		284.417(d)	29
		·	T-1-1-1	MANIFESTING			
M				Manifest prepared as required.		284.712(a)-(e)	30
\boxtimes		Ш	Ш	Exception reporting conducted as required.		284.714(a)-(c)	31
\boxtimes				Manifest copies maintained for at least 5 years.		284.703(b)	32
	\exists	\sqsubseteq	H		<u> </u>		
H		H	H		+		
H		H	H		+		
							· · · · · · · · · · · · · · · · · · ·
H	4	닏			Ц.		
ㅐ	+	H	H		片	<u></u>	
		I					

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of Inspection June 02,	2004 Identification	Number PAD046538211
Company/Facility/Site Lyon	ndell Chemical Company	

A routine inspection of the hazardous, residual, and infectious waste handling methods at Lyondell Chemical Company, located in Newtown Township, Delaware County, was conducted on June 2, 2004 by Melissa Menkevich, accompanied by Jeanne Thompson, Waste Management Specialists, of the Department. Mr. Thomas Baker, Health, Safety, and Environmental Supervisor, was present for Lyondell.

A walk-around tour of the facility was lead by Mr. Baker. The Newtown Lyondell site is a Research and Development facility for their parent Lyondell chemical company. They are listed as a large quantity generator (LQG) of hazardous waste with EPA ID# PAD046538211.

Hazardous waste is generated primarily in satellite accumulation containers from lab wastes from their R&D operation. Lyondell operates "bay" lab areas of their B and E buildings. Several "lab banks" and bay areas were inspected. All hazardous waste satellite accumulation containers were properly labeled with Lyondell hazardous waste tags. These containers are primarily glass chemical bottles and jugs, and when they are full, they are dated and placed in the nearest satellite collection area, to again be collected (usually 3 times a week) by a member of the hazardous waste team to be consolidated into drums or labpacks, and placed in one of the main storage areas.

The main hazardous and residual waste storage area outside of the B building was inspected. It was properly labeled and had proper containment. All hazardous drums and totes were labeled and dated correctly. All residual waste containers were in compliance as well. Lyondell operates a glass-crushing machine in this area as well. Crushed glass and consolidated lab trash are placed into residual waste drums.

The smaller storage area outside of the E building was observed. It was properly labeled and had proper containment. No waste was observed in this area.

Lyondell's aboveground residual wastewater tank was observed. It was properly labeled "residual waste" and "waste water," in compliance with the PA Residual Waste Regulations. The water is discharged

This inspection report is notice of the findings of an inspection conducted by a representative of the Department. This report is formal notification of any violations observed during the inspection.

Additional notification of violations may be issued concerning either violations noted herein, or other violations identified as a result of review of laboratory analyses or Department records.

This report does not constitute an order or other appealable action of the Department. Nothing

This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein.

Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.

Inspector (signature) Melissa Merberry Date 6-2-04

Onto 10 Date 10-2-04

Page Sof 7

ER-WM-129: Rev. 7/95

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of Inspection June 02, 2004 Identification Number PAD046538211
Company/Facility/Site Lyondell Chemical Company
daily to the local POTW per discharge permit #202-D30 from DELCORA (effective July 19, 1999; expires July 18, 2004).
Infectious waste generated at the facility is from routine Lyondell employee drug tests. The drug testing room was observed. One empty red infectious waste container was observed in the room. It was lined with a red bag and was properly labeled. Stericycle makes regularly scheduled visits to Lyondell for the transport of infectious waste. Infectious waste manifests were reviewed from 2003– present and found to be in compliance.
A paperwork review was conducted. The following items were reviewed and found to be in compliance: 2003 Chemical Analysis Report (26R), 2003 Hazardous Waste Biennial Report, weekly inspection logs of the hazardous/residual waste storage areas, hazardous waste employee training records, Hazardous and non-hazardous waste manifests from 2003 – present. Lyondell's PPC plan should be updated to include the Department's new contact information for the Southeast Regional Office. Mr. Baker is making another revision to Lyondell's Source Reduction Strategy (25R). It has been reviewed up to March 2004.
No violations were noted.
This inspection report is notice of the findings of an inspection conducted by a representative of the Department. This report is formal notification of any violations observed during the inspection. Additional notification of violations may be issued concerning either violations noted herein, or other violations identified as a result of review of laboratory analyses or Department records. This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein. Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.
Person interviewed (signature) Munus Daker Date 6-2-04
Inspector (signature) / Chasa/Markers Date 6-2-07
Page 9 of 2



Inspection Date	6/30/03
Time Start	11:00 AM
Time Finish	4:30 PM

Н	IAZARDOUS WASTE	INSPEC	TIC	N REPORT
\boxtimes	GENERATOR		Q	GENERATOR

Со	Company name Lyondell Chemical Company I.D. Number	er PAD046538211
Site	Site Address 3801 West Chester Pike	
Со	County Delaware Municipality Newtown Township	Zip <u>19073</u>
Na	Name of Inspector Melissa Menkevich	
Na	Name & Title of Responsible Official Thomas Baker - Health, Safety, and Environmenta	al Supervisor
Pe	Person Interviewed Thomas Baker Telephone	(<u>610</u>) <u>359-4849</u>
Ма	Mailing Address (if different from above) 3801 West Chester Pike, Newtown Square, P.	A 19073
Am	Amount of Hazardous Waste Generated per Month: <<2,200 Pounds	Kgs
1.	1. Site Characterization:	
	STORAGE: Container Tanks Containment Bldg. Drip Pad	Other
	PBR: Neutralization/WWTP Reclaim	Other
	GENERATOR TREATMENT	ent Bldg.
2.	2. Universal Waste: Large Quantity Handler Small Quantity Handler	
	Universal Waste Types Fluorescent bulbs	
3.	3. Hazardous Waste Transporters:	
	Transporter Name Onyx Environmental Services License Nu	ımber <u>PA-AH 0500</u>
	Transporter Name Dart Trucking Company, Inc. License Nu	ımber <u>PA-AH 0219</u>
		ımber (NJ) 7107
4.	4. Types of hazardous waste generated and destination facility (location & type	

Waste Code	Waste Description	Destination Facility
F003	Waste flammable liquids, corrosive	Onyx Environmental Services, NJD980536593
D001	Waste flammable solids; waste metal catalyst	Onyx, NJ
D008	Waste toxic solids, inorganic	Onyx, NJ
D003	Waste toxic liquids, organic	Onyx, NJ
D002	Waste corrosive liquids	Onyx, NJ
D007	Waste hazardous solids	Onyx, NJ
P120	Waste toxic liquids, flam. organic	Onyx, NJ
D009	Haz. waste solid	Onyx, NJ



nspection Date	6/30/03
Time Start	***************************************
Time Finish	

HAZARDOUS WASTE INSPECTION REPORT ☑ GENERATOR ☐ S Q GENERATOR

Со	mpany name <u>Lyondell C</u>	hemical Company I	.D. Number <u>PAD046538211</u>	
		Municipality	Zip	
Na	me of Inspector			
Na	me & Title of Responsib	le Official		
Ма	illing Address (if differen	t from above)		
Αm	ount of Hazardous Was	te Generated per Month:Po	oundsKgs	
1.	Site Characterization:			
	STORAGE: Conf	tainer 🗌 Tanks 🔲 Containment Bldg. 🗌 Dri	p Pad Other	
	PBR: Neut	tralization/WWTP 🔲 Reclaim	Other	
	GENERATOR TREAT	MENT ☐ Containers ☐ Tanks ☐	Containment Bldg.	
2.	Universal Waste:	Large Quantity Handler	Handler	
	Universal Waste Ty	ypes		
3.	Hazardous Waste Tra	nsporters:		
	Transporter Name	Safety-Kleen Systems, Inc.	icense Number <u>PA-AH 0172</u>	
	Transporter Name		icense Number	
	Transporter Name		icense Number	
4.	Types of hazardous w	vaste generated and destination facility (location	on & type).	
	Waste Code	Waste Description	Destination Facility	
	F003	RQ Waste Flammable liquids	Onyx Env. Svcs., OHD093945293	
	F005	RQ waste flammable liquids	Onyx, OH	
	D039	Waste combustible liquids (petroleum naptha)	Safety-Kleen Systems, Inc., PAD000738849	

HAZARDOUS WASTE INSPECTION REPORT **GENERATORS -- SMALL QUANTITY GENERATORS**

Site Name Lyondell Chemical Company ID Number PAD046538211 4 - Non Compliance 1 - No Violation Observed 2 - Not Applicable 3 - Not Determined

STATUS PA CIT.					PA CIT.	FED. CIT.	LINE
1	2	3	4	REQUIREMENT	25 PA Code	40 CFR	NO.
				Hazardous waste determination performed on all waste streams	262a.10	262.11	H001
\boxtimes				Identification Number	262a.10	262.12	H002
\boxtimes				Authorized transporters only	262a.10	262.12(c)	H003
\boxtimes				Subsequent notification requirements met	262a.12(b)		H004
.চন্দ্ৰ				Proper manifest used	262a.10	262.21	H005
				Manifests filled out correctly and completely	262a.20		H006
\boxtimes				Manifests signed and routed properly	262a.23(a)	262.23	H007
\boxtimes				Generator waste accumulated on site for 90 days or less	262a.10	262.34(a)	H008
	\boxtimes			SQG waste accumulated on site for 180 days max unless 200 mile distance rule applies - 270 days	262a.10	262.34(e)(f)	H009
	\boxtimes			SQG waste accumulated on-site never exceeds 6000 kg	262a.10	262.34(e)(f)	H010
\boxtimes				Satellite accumulation requirements complied with	262a.10	262.34(c)	H011
\boxtimes				Personnel training program per 265.16 complied with	262a.10	262.34(a)(4) 262.34(d)	H012
\boxtimes				Manifest exception and biennial reports retained for 3 years	262a.10	262.40(a)(b)	H013
				Specified records retained for three years	262a.10	262.40(c)	H014
\boxtimes				Biennial reports submitted to the Department (LQG only)	262a.41	262.41	H015
\boxtimes				Exception reporting procedures followed	262a.42	262.42	H016
L				Spill reporting procedures followed	262a.10	262.34(d)	H017
\boxtimes				PPC plan developed and implemented	262a.10	262.34(a)	H018
	\boxtimes			Special requirements followed for international shipments	262a.10	262.50 262.60	H019
		X		Source reduction strategy prepared and available (LQG only)	262a.100		H020
\boxtimes				Excluded waste complies with exclusionary requirements	261a.4	261.4	H021

HAZARDOUS WASTE INSPECTION REPORT GENERATORS -- SMALL QUANTITY GENERATORS FACILITY SPECIFICS

Site Name	Lyondell Chemical Compa	ny ID Number	PAD046538211	Date 6/30/03
	1 - No Violation Observed	2 - Not Applicable	3 - Not Determined	4 - Non Compliance
SILTATE				

STATUS FED CIT. LINE PA CIT. REQUIREMENT 25 PA Code 40 CFR NO. **CONTAINERS** (Subchapter I) \boxtimes 262.34 H025 Containers managed in compliance with 40 CFR Part 265 262a.10 Subpart I and 25 PA Code Chapter 265a Subchapter I \boxtimes Containers of hazardous waste in good condition 265.171 H026 265a.1 \boxtimes П П Containers and stored waste compatible 265a.1 265.172 H027 H028 Containers kept closed except during addition or removal 265a.1 265.173(a) of wastes X Containers managed to prevent leaks 265a.1 H029 265.173(b) H030 П Container configuration and spacing insures safe 265a.173 management and access for inspection purposes and emergency equipment \boxtimes H031 Container storage areas inspected at least weekly 265a.1 265.174 X П Special requirements for ignitable or reactive and 265a.1 265.176-177 H032 incompatible waste complied with \boxtimes Proper containment and collection systems in place H033 265a.179 П П П H034 Air emission standards complied with (AA, BB, CC) 265a.1 265.178 X П H035 П Containers clearly marked with accumulation date and 262a.10 262.34(a)(2) visible for inspection \boxtimes H036 Containers labeled "Hazardous Waste" 262a.10 262.34(a)(3) Containers labeled accurately identify contents H037 冈 **SWMA** 6018.403(b)

2540-FM-LRWM0406 Rev. 10/2001



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION 3UREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Inspection I	D	Market Control
Field Code		

INSPECTION REPORT - RESIDUAL WASTE GENERATOR

Site I.D.: PAD046538211 Site Name: Lyondell Chemical Company Address: 3801 West Chester Pike, Newtown Square, PA 19	Operator Name:
Municipality: Newtown Township Responsible Official: Person Interviewed: Thomas Baker Inspector: Melissa Menkevich	Title: Title: Environmental Supervisor Title: Waste Management Specialist
eFACTS ID #: PF	
Waste Description: see 2002 Residual Waste Biennial Report Treatment: ☐ Yes ☐ No ☐ Type:	
Type of Storage: Containers Tanks Piles Disposition: Destination Facility	•
Location: Amount Generated:	Type:
Waste Description:	
Type of Storage: Containers Tanks Piles Disposition: Destination Facility	☐ Impoundments
Location:	Type:
`Vaste Description: Freatment: ☐ Yes ☐ No Type:	Waste Code:
Type of Storage: Containers Tanks Piles Disposition: Destination Facility	
Location:	· · · · · · · · · · · · · · · · · · ·
Waste Description:	Waste Code:
Treatment: Yes No Type: Type of Storage: Containers Tanks Piles Disposition: Destination Facility	☐ Impoundments
Location: Amount Generated:	Type:

Site Name ID Number Date Lyondell Chemical Company PAD046538211

6/30/03

INSPECTION REPORT - RESIDUAL WASTE GENERATOR (Cont'd)

1 - No Violation Observed 2 - Not-Applicable 3 - Not-Determined 4 - Non-Compliance

STATUS					CHAPTER	LINE	
1 2	2 :	3	4	GENERAL REQUIREMENTS COMM		CITATION	ITEM
				Designated facility: valid permit? Permit Number (PA)		287.6	1
				Biennial report submitted by March 1 of each odd numbered year.		287.52(a)	2
				Written source reduction strategy on file and in effect.		287.53	3
		X		Waste reduction strategy covers all waste streams.		287.53(b)	4
		3		Reduction strategy updated every five years or when waste or manufacturing process changes.		287.53(c)	5
Ø C				Waste analysis performed: copy on file.	П	287.54	6
				Annual analysis or certification of waste submitted to Department and designated facility.		287.54(b)(f)	7
][[]		Chemical analysis updated every five years or when waste or manufacturing process changes.		287.54(g)	8
				Generator record keeping requirements.		287.55	9
XC				Operation of disposal or processing facility without a permit.		287.101(a)	10
				STORAGE REQUIREMENTS			
ØL][[]		Residual waste not mixed with hazardous waste.		299.111(1)	11
Ø	ŢŢŢ	٦t	M	Waste stored as not to create a safety risk.	Ħ	299.111(2)	12
Ø F	ĪΤ	7	M	Residual waste not mixed with special handling waste.	Ħ	299.111(3)	13
Ø	ij	Ħ٢		Waste not blown or otherwise deposited outside storage area.	Ħ	299.111(4)	14
	iti	7	Ħ	Storage area inspected; records available.	Ħ	299.112(c)	15
ØC	₹¦⋛	 	Ħ	All waste stored less than one year.	Ħ	299.113(a)	16
ØE	┪┢	╡┼	H	Equipment maintained in operable condition.	Ħ	299.114(a)	17
X	╅┼╞	╡┼	ĦI	Equipment cleaning frequencies maintained.	Ħ	299.114(c)	18
	╅┼╞	=	H			299.115	19
	֓֞֞֜֞֞֜֞֜֞֜֞֓֓֓֓֞֜֜֞֜֞֓֓֓֓֞֜֜֞֓֓֓֡֓֞֜֜֞֡֓֓֡֓֡֡	1		Run on, runoff minimized; storage areas managed in accordance with Clean Streams Law.		299.116(a)(b)	20
M C	٦t٢	7	П	Waste stored to prevent groundwater degradation.	П	299.116(c)	21
	îlī	7	H	Sufficient number of properly constructed storage containers.	Ħ	299.121	22
	╗	Ħ٢	H	Storage containers labeled properly.	Ħ	299.121(d)	23
	计片	4	Ħ	Storage container height and access requirements.	Ħ	299.121(e)	24
HH		∄┼	Ħ	Storage tank design standards.	Ħ	299.122	25
一十一			Ħt	Storage tanks labeled properly.	Ħ	299.122(a)	26
	֓֜֞֜֞֜֜֜֜֓֓֓֓֓֓֜֜֜֜֜֓֓֓֓֡֓֜֜֜֡֓֓֡֡֡֡֡֡֓֜֜֜֡֡֡֡֓֡֓֡֡֡֡֡֓֡֡֡֡֡֡	1		No putrescible waste or liquid waste stored in piles.		299.112(d), 299.131(b)	27
		7		Waste storage pile area properly designed, constructed and maintained.		299.131	28
		٦t		Storage pad or liner system properly designed and maintained.		299.132	29
		7	Ħ	Proper design and maintenance of leachate and runoff control systems.		299.133	30
		Ŧ٢	币	Proper storage and containment of incinerator ash residue.	Ħ	299.151	31
	_	ゴ ナ	Ħ	Proper storage and containment of friable asbestos containing waste.	Ħ	299.152	32
	_	$\dashv +$	計	Proper storage and containment of coal ash.	Ħ	299.153	33
N F	╣┼	╡┼	ᆔ	Proper storage and containment of PCB containing waste material.	Ħ	299.154	34
	計片	=+	뉘	Proper storage and containment of 1 Ob containing waste material. Proper storage of whole and processed tires.	H	299.155	35
HH	╡┼	╡┼	뉘	Tropor diorage of whole and processed thes.	Ħ	20000	+==
	╅┼┾	=+	Ħ		Ħ		1
 - - - - 	┽┼╞	┽┼	H		H		+
┝╡┼╞	╬	┽┼	屵		 -		+
┝	╅┼╞	┽┼	₩		₩		+
┟┾╡┼╞╸	╣┼	╡┼	뭐		뭐		+
╟┽╟	╣╬	╬	뭐		井		
			$\sqcup \rfloor$		<u> </u>	L	

2540-FM-LRWM0425 Rev. 8/2001

Site I.D.: PAD046538211



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Inspection ID	
Field Code	

INSPECTION REPORT INFECTIOUS OR CHEMOTHERAPEUTIC WASTE GENERATOR

Telephone #: 610-359-4849

Sit	e Na	ame	: <u>L</u> y	ondell Chemical Company	Operator Name:					
Ad	dres	ss: Ś	380	1 West Chester Pike, Newtown Square, PA 19073	Address:					
					Ot Del					
				Newtown Township	County: Delaware Title:					
				Official:ewed: Thomas Baker	Title: Environmental Su					
				licas Mankaviah	Title: Waste Manageme					
	•				# Violation: 0	ient opedianst				
	Inspection Date: 6/30/03 # Violation: 0 eFACTS ID #: PF									
Comment:										
	pection Date: 6 /30 / 03 Type: routine Results: 0 violations Resolved: / /									
۲				tion Date: / / Days/Week Operat			Max. Daily Volume:			
				chemotherapeutic waste generated: 5 to 20 pounds/m			nonth			
1 - No Violation Observed 2 - Not-Applicable 3 - Not-Determined 4 - Non-Compliance										
	TA		\$-500,054		COMME	NTS	CHAPTER CITATION	LINE		
	_2 □	3	-4 	Storage in compliance with \$6 294 401 294 410	ATTACH	IED.	284.401	1		
□ □ □ □ □ 284.401 1 BASIC STORAGE										
\boxtimes				Integrity of containers maintained, leakage and releas		284.411(a)(1)	2			
\boxtimes				Spread of infectious agents prevented; vectors control		284.411(a)(2),(3)	3			
\boxtimes				Waste maintained in a nonputrescent state; odors pre			284.411(a)(4),(5)	4		
\boxtimes				Unauthorized access to waste prevented; enclosecured.		284.411(a)(6)(i)	5			
Σ ¹	~ <u>[</u>			Enclosures or containers marked with prominent warn		284.411(a)(6)(ii)	6			
	ت			Enclosures capable of being readily maintained in a sa			284.411(b)	7		
\boxtimes				Infectious and chemotherapeutic waste not commingle		284.411(c)	8			
				SORTING						
\boxtimes				Infectious and chemotherapeutic waste placed in se other waste at the point of origin.		284.412(a)	9			
	\boxtimes			Infectious and chemotherapeutic waste stored together only with Department approval.	284.412(b)	10				
\boxtimes				Infectious and chemotherapeutic waste sorted propo and each class of waste placed in a separate contained		284.412(d)(1)-(3) (e)(1)-(3)	11			
DURATION OF STORAGE										
\boxtimes				Infectious waste stored for no longer than 30 days at r		284.413(a)(1),(2)	12			
\boxtimes				Infectious waste stored for no longer than 90 days in a		284.413(a)(3)	13			
\boxtimes				Putrescent infectious waste moved off-site within 24 h		284.413(b)	14			
\boxtimes				Infectious waste sharps managed according to 284.41		284.413(c)	15			

Site Name ID Number Date

Lyondell Chemical Company PAD046538211 6/30/03

INSPECTION REPORT INFECTIOUS OR CHEMOTHERAPEUTIC WASTE GENERATOR (Cont'd)

□ □ □ Used sharps stored in proper containers. □ 284.415(b)(1)-(3) 17 □ □ □ Infectious and chemotherapeutic waste fluids stored in proper containers. □ 284.415(c)(1)(2) 18 □ □ □ Double bagging employed when bags are the only storage container. Bags meet strength and certification requirements. □ 284.415(d)(1)-(4) 19 □ □ □ Yellow bags used for chemotherapeutic waste; red bags used for infectious waste. □ 284.415(d)(5) 20 □ □ □ Protective clothing worn by persons packaging infectious or chemotherapeutic waste for offsite shipment. □ 284.415(f) 21 ■ □ □ Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label. □ 284.416(a),(b) 22 □ □ □ Outermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste." □ 284.416(c) 23 □ □ □ Labeling information colored red for infectious waste, yellow for chemotherapeutic waste, with contrasting color backgrounds. □ 284.416(d) 24 □ □ □ Stationery containers lined with appropriately colored bag. □ 284.417(a) 26 □ □ □ Nonrigid containers not reused. □ 284.417(a) 26 □ □ □ Corrugated fiberboard containers reused only if container protected from waste waste. □ 284.417(b) 27 □ □ □ Rigid containers used to store chemothera	1 - No Violation Observed 2-Not-Applicable 3-Not-Determined 4-N	lon-	Compliance	
□ □ □ Infectious and chemotherapeutic waste stored in proper containers □ 284.415(a)(1)-(3) 16 □ □ □ Used sharps stored in proper containers. □ 284.415(b)(1)-(3) 17 □ □ □ Infectious and chemotherapeutic waste fluids stored in proper containers. □ 284.415(b)(1)-(3) 17 □ □ □ Double bagging employed when bags are the only storage container. Bags meet strength and certification requirements. □ 284.415(d)(1)-(4) 19 □ □ □ Yellow bags used for chemotherapeutic waste; red bags used for infectious waste. □ 284.415(d)(5) 20 □ □ Protective clothing worn by persons packaging infectious or chemotherapeutic waste for offsite shipment. □ 284.415(d)(5) 21 □ □ Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label. □ 284.416(a),(b) 22 □ □ □ Outermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste." □ 284.416(c) 23 □ □ □ Labeling information colored red for infectious waste, yellow for chemotherapeutic waste, with contrasting color backgrounds. □ 284.416(d) 24 □ □ □ Stationery containers lined with appropriately colored bag. □ 284.417(a) 26 □ □ □ Corrugated fiberboard containers reused only if container protected from waste or container has been decontaminated by a	REQUIREMENT ATTACH		Description of the control of the co	歌りぶつ しきけいしょう
□ □ □ Used sharps stored in proper containers. □ 284.415(b)(1)-(3) 17 □ □ □ Infectious and chemotherapeutic waste fluids stored in proper containers. □ 284.415(c)(1)(2) 18 □ □ □ Double bagging employed when bags are the only storage container. Bags meet strength and certification requirements. □ 284.415(d)(1)-(4) 19 □ □ Vellow bags used for chemotherapeutic waste; red bags used for infectious waste. □ 284.415(d)(5) 20 □ □ Protective clothing worn by persons packaging infectious or chemotherapeutic waste for offsite shipment. □ 284.415(f) 21 ■ □ □ Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label. □ 284.416(a),(b) 22 □ □ Usermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste." □ 284.416(c) 23 □ □ Labeling information colored red for infectious waste, yellow for chemotherapeutic waste, with contrasting color backgrounds. □ 284.416(d) 24 □ □ Stationery containers lined with appropriately colored bag. □ 284.417(a) 26 □ □ Nonrigid containers not reused. □ 284.417(b) 27 □ □ Corrugated fiberboard containers reused only if container protected from waste waste. □ 284.417(b) 27 □ □ Rigid, nonfiberboard containers reused only if container p	STORAGE CONTAINERS			
□ □ Infectious and chemotherapeutic waste fluids stored in proper containers. □ 284.415(c)(1)(2) 18 □ □ Double bagging employed when bags are the only storage container. Bags □ 284.415(d)(1)-(4) 19 meet strength and certification requirements. □ 284.415(d)(1)-(4) 19 waste. □ Yellow bags used for chemotherapeutic waste; red bags used for infectious □ 284.415(d)(5) 20 waste. □ Protective clothing worn by persons packaging infectious or □ 284.415(f) 21 chemotherapeutic waste for offsite shipment. WARKING OF CONTAINERS □ □ □ Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label. □ Outermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste." 284.416(c) 23 with biohazard symbol and "infectious waste" or "chemotherapeutic waste." 284.416(d) 24 Chemotherapeutic waste, with contrasting color backgrounds. □ 284.416(e) 25 REUSE OF CONTAINERS □ □ Nonrigid containers included with appropriately colored bag. □ 284.417(a) 26 □ □ Corrugated fiberboard containers reused only if container protected from waste. □ 284.417(b) 27 Waste. □ □ Rigid, nonfiberboard containers reused only if container protected from waste. □ 284.417(d) 29 Rigid containers used to store chemotherapeutic waste reused only if □ 284.417(d) 29 Rigid containers used to store chemotherapeutic waste reused only if □ 284.417(d) 29 Container protected from waste. □ Rigid containers used to store chemotherapeutic waste reused only if □ 284.417(d) 29 284.417(d) □ Rigid containers used to store chemotherapeutic waste reused only if □ 284.417(d) 29 284.417(d) □ 29 284.417(d) □ 29 284.417(d) □ 284.417(d) □ 29 284.417(d) □ 284.417(d) □ 29 284.417(d) □ 284.417	Infectious and chemotherapeutic waste stored in proper containers		284.415(a)(1)-(3)	16
□ □ □ □ Infectious and chemotherapeutic waste fluids stored in proper containers. □ 284.415(c)(1)(2) 18 □ □ □ Double bagging employed when bags are the only storage container. Bags □ 284.415(d)(1)-(4) 19 meet strength and certification requirements. □ 284.415(d)(1)-(4) 19 waste. □ □ Yellow bags used for chemotherapeutic waste; red bags used for infectious □ 284.415(d)(5) 20 waste. □ □ Protective clothing worn by persons packaging infectious or □ 284.415(f) 21 chemotherapeutic waste for offsite shipment.	Used sharps stored in proper containers.		284.415(b)(1)-(3)	17
□ □ □ Double bagging employed when bags are the only storage container. Bags meet strength and certification requirements. 284.415(d)(1)-(4) 19 □ □ Yellow bags used for chemotherapeutic waste; red bags used for infectious waste. 284.415(d)(5) 20 □ □ Protective clothing worn by persons packaging infectious or chemotherapeutic waste for offsite shipment. 284.415(f) 21 MARKING OF CONTAINERS □ □ □ Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label. 284.416(a),(b) 22 □ □ □ Outermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste." 284.416(c) 23 □ □ □ Labeling information colored red for infectious waste, yellow for chemotherapeutic waste, with contrasting color backgrounds. 284.416(d) 24 □ □ □ Stationery containers lined with appropriately colored bag. 284.417(a) 26 □ □ □ Nonrigid containers not reused. 284.417(a) 26 □ □ □ Nonrigid containers not reused. 284.417(a) 26 □ □ □ Rigid, nonfiberboard containers reused only if container protected from waste or container has been decontaminated by approved means. 284.417(b) 29 □ □ □ Rigid containers used to store chemotherapeutic waste reused only if container protected from waste. 284.417(d)			284.415(c)(1)(2)	18
waste. Waste. Protective clothing worn by persons packaging infectious or chemotherapeutic waste for offsite shipment. Warking OF CONTAINERS 284.416(a),(b) 22	Double bagging employed when bags are the only storage container. Bags	284.415(d)(1)-(4)	19	
Chemotherapeutic waste for offsite shipment. MARKING OF CONTAINERS	· · · · · · · · · · · · · · · · · · ·		284.415(d)(5)	20
☑ ☐ ☐ Outermost container of infectious or chemotherapeutic waste for offsite transport labeled immediately with proper label. 284.416(a),(b) 22 ☑ ☐ ☐ Outermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste." 284.416(c) 23 ☑ ☐ ☐ Labeling information colored red for infectious waste, yellow chemotherapeutic waste, with contrasting color backgrounds. 284.416(d) 24 ☑ ☐ ☐ Stationery containers lined with appropriately colored bag. 284.416(e) 25 REUSE OF CONTAINERS ☑ ☐ ☐ Nonrigid containers not reused. 284.417(a) 26 ☑ ☐ ☐ Corrugated fiberboard containers reused only if container protected from waste. 284.417(b) 27 ☑ ☐ ☐ Rigid, nonfiberboard containers reused only if container protected from waste or container has been decontaminated by approved means. 284.417(c)(1)(2) 28 ☑ ☐ ☐ Rigid containers used to store chemotherapeutic waste reused only if container protected from waste. 284.417(d) 29 ☑ ☐ ☐ Manifest prepared as required. 284.712(a)-(e) 30 ☑ ☐ ☐ Exception reporting conducted as required. 284.714(a)-(c) 31	recours soming worm by persons paskaging internets of		284.415(f)	21 (
transport labeled immediately with proper label. Coutermost container of infectious or chemotherapeutic waste properly labeled with biohazard symbol and "infectious waste" or "chemotherapeutic waste." 284.416(c) 23	 MARKING OF CONTAINERS		4	
with biohazard symbol and "infectious waste" or "chemotherapeutic waste."			284.416(a),(b)	22
chemotherapeutic waste, with contrasting color backgrounds. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐	Cutofficer container of filectical of chemoticapounts fractor properly lastice		284.416(c)	23
REUSE OF CONTAINERS			284.416(d)	24
Nonrigid containers not reused. 284.417(a) 26	Stationery containers lined with appropriately colored bag.	284.416(e)	25	
Corrugated fiberboard containers reused only if container protected from Saturation Satu	 REUSE OF CONTAINERS			
waste. Rigid, nonfiberboard containers reused only if container protected from waste or container has been decontaminated by approved means. Rigid containers used to store chemotherapeutic waste reused only if container protected from waste. MANIFESTING Manifest prepared as required. Exception reporting conducted as required.	Nonrigid containers not reused.		284.417(a)	26
or container has been decontaminated by approved means. Rigid containers used to store chemotherapeutic waste reused only if 284.417(d) 29 Container protected from waste. MANIFESTING Manifest prepared as required. Description reporting conducted as required. Description reporting conducted as required.		284.417(b)	27	
Container protected from waste. MANIFESTING Manifest prepared as required. □ 284.712(a)-(e) 30 □ □ □ Exception reporting conducted as required. □ 284.714(a)-(c) 31			284.417(c)(1)(2)	28
□ □ □ 284.712(a)-(e) 30 □ □ □ 284.712(a)-(c) 31	riigid contamore dood to crop chomotherapoutte maste reason only in		284.417(d)	29
⊠ □ □ □ Exception reporting conducted as required. □ 284.714(a)-(c) 31	MANIFESTING			
	Manifest prepared as required.		284.712(a)-(e)	30
☑ ☐ ☐ Manifest copies maintained for at least 5 years. ☐ 284.703(b) 32 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	Exception reporting conducted as required.		284.714(a)-(c)	31
	Manifest copies maintained for at least 5 years.		284.703(b)	32
		므_		ļ
		ឣ		
		H		
		뷰		
		+		

ER-WM-129: Rev. 7/95

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of	Inspection	June	30,	2003		Identification	Number	PAD046538211
Company	/Facility/Si	te	Lyon	dell	Chemical	Company		

A routine inspection of the hazardous, residual, and infectious waste handling methods at Lyondell Chemical Company, located in Newtown Township, Delaware County, was conducted on June 30, 2003 by Melissa Menkevich, Waste Management Specialist, of the Department. Mr. Thomas Baker, Health, Safety, and Environmental Supervisor, was present for Lyondell.

A walk-around tour of the facility was lead by Mr. Baker. The Newtown Lyondell site is a Research and Development facility for their parent Lyondell chemical company. They are listed as a large quantity generator (LQG) of hazardous waste with EPA ID# PAD046538211. The facility's property is now owned by the software company SAP, and Lyondell leases from SAP. The Bayer Corporation (EPA ID# PAR000023994) is no longer operating at this site.

Hazardous waste is generated primarily in satellite accumulation containers from lab wastes from their R&D operation. Lyondell operates "bay" lab areas of their B and E buildings. B-Bay areas 1, 2, 3, 6, 7, and E-Bay areas/2, 3, and 4 were inspected. All hazardous waste satellite accumulation containers were properly labeled with Lyondell hazardous waste tags. These containers are primarily glass chemical bottles and jugs, and when they are full, they are dated and placed in the nearest satellite collection area, to again be collected (usually 3 times a week) by a member of the hazardous waste team to be consolidated into drums or labpacks, and placed in one of the main storage areas.

The main hazardous waste storage area outside of the B building was inspected. It was properly labeled and had proper containment. All drums and totes were labeled and dated correctly. The oldest drums were dated 5/15/03. Residual waste drums in this area were observed as well to be properly labeled, and Mr. Baker explained that the use of an in-house inventory system ensures that no residual waste is stored for over one (1) year. Onyx transports both hazardous and residual wastes from Lyondell several times a month.

The smaller storage area outside of the E building was observed. It was properly labeled and had proper containment. No waste was observed in this area.

This inspection report is notice of the findings of an inspection conducted by a representative of the Department. This report is formal notification of any violations observed during the inspection. Additional notification of violations may be issued concerning either violations noted herein, or other
violations identified as a result of review of laboratory analyses or Department records. This report does not constitute an order or other appealable action of the Department. Nothing
contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein.
Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.
A A
Person interviewed (signature) Okumus Daker Date 7/1/03
Inspector (signature) Relissa Merkeirch Date 7/1/03
Page 9 of 11

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of Inspection June 30, 2003 Identification Number PAD046538211

Company/Facility/Site Lyondell Chemical Company

NON-contact
Lyondell (and SAP) operates a residual wastewater treatment system for their industrial cooling
water. This water is collected in residual waste storage tank, allowed to fill
and settle, and then discharged to the local POTW per discharge permit #202-D30 from DELCORA
(effective July 19, 1999; expires July 18, 2004). Mr. Baker explained that usually only leaves and other
debris settle from the water, but that this debris would be handled and shipped as residual waste. The
discharged water is also considered residual waste, and is included on Lyondell's 2002 Residual Waste
Biennial Report. The tanks for the water treatment system were not labeled. 25 PA Code 299.122(a) states,
"a storage tank shall be clearly labeled as 'residual waste' and the type of residual waste shall be identified."
A copy of the PADEP Residual Waste regulations will be given to Mr. Baker along with this report.
Infectious waste generated at the facility is from routine Lyondell employee drug tests. The
infectious waste is primarily urine used for the drug analyses. The drug testing room was observed. One
empty red infectious waste container was observed in the room. It was lined with a red bag and was
properly labeled. Stericycle makes regularly scheduled visits to Lyondell and boxes up and transports offsite
any infectious wastes present. Infectious waste manifests were reviewed from 2002 – present and found to
be in compliance.
A paperwork review was conducted. The facility's PPC plan was last revised 4/29/03 and was found
to be in compliance. The facility's 2001 Hazardous Waste Biennial Report and its 2002 Residual Waste
Biennial Report were reviewed and were found to be in compliance. Weekly inspection logs of the
hazardous waste storage areas, as well as Lyondell hazardous waste employee training records and
Lyondell's Chemical Analysis Report (26R), were reviewed and also found to be in compliance. Hazardous
and non-hazardous waste manifests were reviewed from 2002 – present and found to be in compliance. The
most recent shipment was from 6/19/03.
Lyondell's source reduction strategy (25R) was reviewed but was not determined to be fully
completed or up-to-date. The most recent data observed appeared to be from 1998. The source reduction
strategy should be updated at least every five (5) years, so 2003 would be the fifth year. In order to ensure
This inspection report is notice of the findings of an inspection conducted by a representative of the Department. This report is formal notification of any violations observed during the inspection.
Additional notification of violations may be issued concerning either violations noted herein, or other
violations identified as a result of review of laboratory analyses or Department records.
This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted
herein.
Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.
Person interviewed (signature) Human Dakes Date 7/1/03
Inspector (signature) Rulissa Markeurih Date 7/1/03
Page 10 of 11

ER-WM-129: Rev. 7/95

Commonwealth of Pennsylvania Department of Environmental Protection Bureau of Land Recycling & Waste Management

Inspection Report Comments

Date of Inspection June 30, 2003 Identification Number PAD046538211

Company/Facility/Site Lyondell Chemical Company

compliance, Lyondell should ensure that its source reduction strategy is updated in a timely fashion in accordance with 25 PA Code 262a.100.
No violations were noted.
Within fourteen (14) days of this receipt of this report, Lyondell should submit to the Department a plan and schedule for addressing the above concerns.
This inspection report is notice of the findings of an inspection conducted by a representative of the Department. This report is formal notification of any violations observed during the inspection. Additional notification of violations may be issued concerning either violations noted herein, or other violations identified as a result of review of laboratory analyses or Department records. This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein. Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.
Person interviewed (signature) Human Baker Date 7/1/03
Inspector (signature) Melisse/Tenpevich Date 7/1/03
Page // of //

INSPECTION REPORT COMMENTS

Company/Facility/Site Name: Lyondell (formerly Arco Chemical)

Identification Number: PAD046538211

Date of Inspection: 03/10/2000

On March 10, 2000, Andy Sinclair and I (Ben Williams) conducted a follow-up inspection of Lyondell located in Newtown Township, Delaware County. We were accompanied on the inspection by Bob Dockerty. The facility produces chemicals components that are utilized in the manufacture of other final items. This particular facility is research and development oriented and a large quantity generator of hazardous waste.

We inspected the main storage area located adjacent to the pouring room and the smaller storage area located adjacent to the pilot plant. The main storage area stores both waste and product and is covered by a roof. The smaller storage area is not covered by a roof and both of these storage areas had contained cracks in the existing concrete during the inspection dated September 8, 1999. We observed both storage areas had been coated with a grayish-green sealant. We observed no visible cracks in the storage areas. No violations were observed during the inspection.

In the "Requirement" Section of this inspection report, each listed inspection item may provide only a brief version of its corresponding obligation as described in the body of the regulations. Please use the Chapter citations listed on this inspection report as a reference to obtain a detailed description of compliance requirements.

This inspection report is official notification that a representative of the Department of Environmental Protection, Waste Management Program, inspected the above installation. The findings of this inspection are shown in this report. This inspection report shall serve a formal notification of any violations which were observed during the inspection. Violations may also be discovered upon examination of the results of laboratory analyses and review of Department records. Additional notification may be forthcoming, concerning any violations indicated herein and listing any additional violations.

This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein.

Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.

Person Interviewed (Signature)_			Date	
Inspector Signature)	Bens	9. Ille	Date	3-17-00
File name: lyondell3-10-00.doc				Page/_of/_

RCRA Compliance Evaluation Inspection

LYONDELL Worldwide Inc.

3801 Westchester Pike Newtown Square, Pennsylvania 19073

Formerly known as:

ARCO Chemical Company

Telephone Number: 610-359-4604

Date of Inspection: September 8, 1999

RCRA Identification Number: PAD 046538211

SIC number: 2869

EPA Representative:

George H. Houghton

Environmental Protection

Specialist

State Representative:

Benjamin L. Williams Solid Waste Specialist

Facility Representative:

Thomas Baker

Environmental superintendent

Robert Masine

Pilot Plant Superintendent

Howard Miller

BACKGROUND

At the request of the Chemical and Waste Management Division, the Facility inspection Program inspected Lyondell, a research and development activity, located in Newtown Square, Pennsylvania.

FACILITY DESCRIPTION

ARCO Chemical Company was a subsidiary of ARCO, the petroleum company, but formed its own independent company in the 1980s. In July 1998, ARCO Chemical Company merged with Lyondell whose headquarters is in Houston Texas. Headquarters staff, left over from ARCO are currently being transferred to Houston. This facility performs research and development on organic chemicals, principally proplyene oxide including polyol and derivatives. The research progresses from laboratory experiments to small bench scale experiments to a pilot plant. Within this facility are over 100 analytical laboratories. The site covers about 10 acres. Current employment is abut 400.

A portion of the property and one building was sold to SAP America. Reportedly, this company designs soft ware. Their hazardous waste activities, if any, are independent of Lyondell and were not investigated as part of this inspection.

PERMIT STATUS

Lyondell is a large quantity generator storing for less than 90 days in containers. The facility does not have a RCRA Part B permit.

INSPECTION OBSERVATIONS

<u>General</u>

Lyondell has two storage pads for containers of hazardous waste, one is located near the Pilot Plant while the other is

called the 'large pad' or 'main pad'. Each lab that generates waste manages their waste using the satellite accumulation It is facility policy to label all waste as a hazardous waste until a final determination is made by the The waste is first transported to the 'pouring waste handlers. room' where this determination is made. The hazardous waste determination is made using the knowledge from the laboratory generator, ingredients are listed on the container, original container information, MSDS or a combination of these. Additionally, the TSD facility will periodically accomplish a waste analysis as part of the waste profile. Typically, all waste, whether hazardous or not, is disposed in the same Waste from the labs is picked up on manner, incineration. Monday, Wednesday and Fridays. The lab operator places their waste in pans located in the service corridor between the labs (see photo). Lab waste is packed in lab packs and shipped out monthly. The disposal contractor for the lab pack and drum quantity waste is AETS who was recently "bought out" by ONYX. Safety Kleen, used by the facility's maintenance department, disposes the waste from part cleaning. Bulk waste is managed by Clean Harbors.

<u>Satellite</u>

The inspector observed 10 of the labs for compliance with the regulations. In one laboratory (room D2151) a container was observed that was labeled mercury (see photo). It was open at the top with a funnel placed in the opening and held an estimated 10 to 20 ML of waste mercury (see photo). The waste stored in the remaining laboratories appeared to be correctly managed.

In addition to the laboratories, waste is generated at the pilot plant also known as E-Bay 1. One 55 gallon container labeled acetone wash was observed (see photo). This container was open at the large bung hole with a funnel in it. Laying inside the funnel was a pail liner that was placed there for

draining. The inspector observed that this liner was dry. The small bung hole was also open. The container was adequately labeled. Another 55 gallon container was labeled a hazardous waste but the contents labeling was confusing. It was labeled as acetone, IPA (isopropyl alcohol), VAZO (cas #13472-08-7) to be decomposed and hazardous waste. According to this building's representative, Tom Mcaleer, the drum contained an IPA and water mixture.

Less than 90 day storage

One of the storage areas is termed the "small pad" by facility personnel for waste that originates from the pilot plant. It is also known as the 'E-pad'. Waste accumulated in this area originates from the pilot plant (E-Bay). The waste is removed daily to the main less than 90 day storage area. Inspections are weekly and documented. A sump is available to capture spills and rain water. According to the facility, the sump water is either discharged to DELCORA, if found to be contaminated, or to the surface waters if not contaminated. Containers in this area were properly managed. The floor of the containment area was found to have hair line cracks.

The main storage pad is equipped with a berm for spill containment and a canopy for weather protection. The bermed area leads to a sump whose valve is normally closed. Accumulated water is discharged to the facility's WWTP. If the liquid in the sump resulted from a spill or is otherwise contaminated, it is tested and handled accordingly. A spill pan (see photo) is used to stage smaller quantity incoming waste before placement in hazardous material storage cabinets. These containers were first sorted at the pouring room. Eventually this waste will br packed for shipment as lab-packs. This inspector observed that two one gallon containers were not dated, otherwise, all the observed containers appeared to be properly stored. All the drums observed also appeared to be properly stored, although, some of the labels were obscured by

other drums. Inspections were adequate and are documented weekly. Some cracks were noted in the floor of the storage area (see photo).

Subsequent to this inspection, Mr. Baker informed this inspector that a coating would be applied to both the main pad and the E-pad floor to seal the cracks (letter attached).

Pouring area

Waste from the laboratories is brought to this area and its hazardous classification is determined as mentioned earlier. Some of the waste is transferred to the main storage area for lab packing. Like wastes, that can be bulked, are poured into larger containers, usually 55 gallon drums, for ease of shipment. The one drum of bulked waste, observed by this inspector, was closed and dated. During the pouring operation a suction air vent is used to minimize the workers exposure of vapors. This vent discharges directly to the atmosphere and, according to the facility representative, has no air pollution control equipment.

Subpart cc

According to Mr. Baker, the facility has evaluated its waste through knowledge of the waste streams. Their method of complying with the cc regulations is to place all waste in DOT approved containers while the waste is stored in the <90 day storage site.